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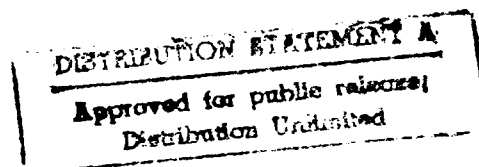
New Orleans District

**CULTURAL RESOURCES
SURVEY OF MILE 306.3
TO 293.4-R ON THE MISSISSIPPI
RIVER, CONCORDIA, POINTE
COUPEE AND WEST FELICIANA
PARISHES, LOUISIANA**

FINAL REPORT

AUGUST 1993

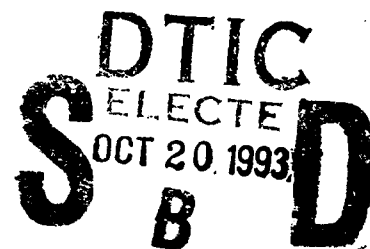
MUSEUM OF GEOSCIENCE
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Prepared for

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| <p>The project area is divided into three segments: Above Old River, Carr Point, and Hog Point. Historical artifacts and architectural debris were found on the slope of the eroding top bank in the Carr Point segment and the Hog Point segment. These sites were designated the Carr Point House Site (16PC23), and the Hog Point House Site (16PC24). Analysis of the material from both sites indicated the remains of two residential structures whose occupations dated from the late nineteenth into the early twentieth century. Neither site was deemed worthy of consideration for the National Register of Historical Places.</p> <p>In addition to the historic sites found within the project area, two prehistoric sites were located in the general region. The Prairie Lake Mound (16C028) turned out to be a site investigated by C.B. Moore in 1911, but never subsequently recorded. 16C029 was a midden site revealed by recent construction activities at the Sidney A. Murray Hydroelectric Plant near the Old River Control Structure. Artifacts from this site point to a Late Marksville and Troyville period occupation.</p> | | | | | |
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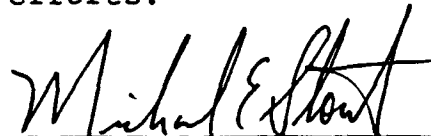
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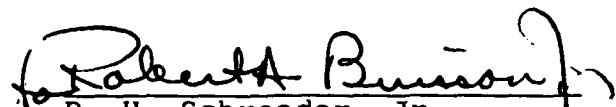
To The Reader:

This cultural resources effort was funded and guided by the U.S. Army Corps of Engineers, New Orleans District as part of our cultural resources management program. The work documented in this report was a cultural resources survey of three revetment construction items along the Mississippi River in the vicinity of the Old River Control Structure.

We concur with the recommendations contained in this report. Therefore, no further archeological work is planned for sites 16PC23 and 16PC24.

We applaud the contractor's efforts to record two prehistoric sites (16C028 and 16C029) located outside the survey limits. These sites add to our understanding of human settlement in this complex area of active river migration and man-made control efforts.


Michael E. Stout
Authorized Representative
of the Contracting Officer


R. H. Schroeder, Jr.
Chief, Planning Division

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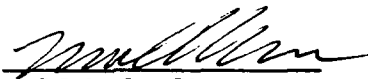
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**CULTURAL RESOURCES SURVEY OF
MILE 306.3 TO 293.4-R ON THE MISSISSIPPI RIVER,
CONCORDIA, POINTE COUPEE,
AND WEST FELICIANA PARISHES,
LOUISIANA**

FINAL REPORT

by

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Prepared for

**U.S. Army Corps of Engineers
New Orleans District**

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**Louisiana State University
Baton Rouge, Louisiana
August 1993**

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CHAPTER I

INTRODUCTION

This report presents a description and results of archeological, historical, and geomorphological research for portions of the west bank of the Mississippi River that are to be the scene of revetment construction. The most outstanding physical aspect of the project area is its proximity to past and present confluences of the Red and Mississippi rivers. This single characteristic has shaped both the natural environment and the nature of human occupation in and around the study area.

The project area is within portions of Concordia, Pointe Coupee, and West Feliciana Parishes, Louisiana. The research was done for the New Orleans District of the U.S. Army Corps of Engineers as part of a general services contract for conducting cultural resources surveys within their district. The personnel from the Museum of Geoscience at Louisiana State University at Baton Rouge and their consultants were responsible for all portions of this report.

The area to be reveted has been divided into three sections: Above Old River, Carr Point, and Hog Point. The Carr Point and Hog Point sections are contiguous to one another. The total area of the survey was approximately 528 acres, with 76.91 acres in the Above Old River segment, 176.77 acres in the Carr Point segment, and 274.33 acres in the Hog Point segment (Figure 1). The field work for this project began in October of 1988 and continued into December of 1988. Artifact analysis, drafting and report writing were done in December of 1988 and January of 1989.

This report will be presented in the following manner. Chapter II contains a discussion of the environmental setting of the study area. This discussion will include the geomorphology of the region, as well as the flora and fauna.

Chapter III will describe the general prehistoric cultural history of the region surrounding the study area. Chapter IV will present a history of the project area, with an additional account of the place of the Mississippi River within that history. Chapter V will give a brief account of past archeological investigations in the region around the project area.

Chapter VI contains a statement of the research design and methodology employed during the survey. Chapter VII has the results of the survey. These results include an account of all the archival data concerning historical sites found within the study area and a description of prehistoric sites near the study area that were reported as a product of this project. Chapter VIII deals with artifact analysis of both the historic and prehistoric sites mentioned in Chapter VII.

Chapter IX summarizes the findings of the survey and makes the appropriate recommendations concerning the sites. These recommendations are made within the context of the research questions presented in Chapter VI and take into account the criteria for reporting sites to the Louisiana Division of Archaeology and nominating sites to the National Register of Historic Places.

CHAPTER II

ENVIRONMENTAL SETTING

Geomorphology of the Lower Mississippi River

Bank stabilization of the lower Mississippi River has been an important mission of the U.S. Army Corps of Engineers, particularly since improvements of artificial levees in response to the flood of 1927 and the introduction of a number of human-induced cutoffs in the 1930's. These projects necessitated a program of bank protection to prevent the recession of caving banks toward the artificial levees and to maintain the current alignment of the river. This report concerns geomorphic aspects of a site being proposed for bank stabilization along a segment of the river downstream of Lower Old River, from mile 303 to mile 294 AHP (above the Head of Passes) in Pointe Coupee and West Feliciana parishes, Louisiana. The background and site geomorphology of this area is part of a more detailed study of the archeology and cultural resources of the proposed project area.

The Mississippi River basin in southeastern Louisiana is bounded to the west and the east by artificial levees except for along the uplands along the left bank where the river is confined by Pleistocene bluffs and in the delta region where artificial levees are discontinuous. It is narrow in width and expands on the downstream end because flow in the Mississippi delta is largely unconfined. The Pontchartrain basin to the east, a marginal basin northeast of the Mississippi River deltaic distributaries that includes much of the Pleistocene uplands of the Florida Parishes, and the Atchafalaya basin (the largest distributary system of the Mississippi River) to the west flank the modern Mississippi River in the proposed project area. Notable cities, towns, and reference points along the river include Tarbert Landing (mile 306.3), St. Francisville (mile 266.0), Baton Rouge (mile 233.8), New Orleans (mile 106.2), Belle Chasse (mile 76.0), and the Head of Passes (mile 0.0).

The proposed project area is located in the Mississippi River alluvial valley, which extends from Cairo, Illinois to an arbitrary location upstream of the Gulf of Mexico where the delta plain originates. Specifically, the proposed project area is located in the vicinity of latitude 30°40' to 31°10' in the Mississippi River valley. Significant geomorphic features in the vicinity of the proposed project area include the Three Rivers, i.e. the connection of the Mississippi with the Red and Atchafalaya Rivers; several oxbow lakes, including Raccourci Island and False River that have been naturally or artificially cutoff from the channel, the distinctive ridge and swale topography of the point bars; and several crevasses and crevasse splays associated with overbank flooding in the past. The proposed project area is positioned near the axis of the Gulf Coast Geosyncline within the lower reaches of the Mississippi Embayment.

The lower Mississippi and Atchafalaya Rivers in south-central and southeastern Louisiana are two of the largest rivers in the United States. The Mississippi River is the largest river on

High Terraces and the late Pleistocene Prairie Terraces (Snead and McCulloh 1984). The alluvial valley contains distinctive meander belts and the delta plain corresponding delta complexes and lobes that are the product of the shifting of the Mississippi River during the Holocene. Geologic environments in the Mississippi River alluvial valley that were recognized by Fisk (1947) are meander belt deposits, including point bar environments; top stratum and slough; abandoned channel environments, including chute cutoffs and neck cutoffs; natural levee deposits; and backswamp deposits.

Meander bends have a concave bank or cut bank which is steep and generally is formed of Holocene meander belt deposits that receive overbank deposition from the channel, and a convex bank or point bar, typically formed of sandy material deposited during recent floods. The concave bank becomes too steep due to the deep scouring action of the stream in bendways, and caves into the river. As the caving bank retreats, the opposite convex bank advances by accretion of sand, derived partly from upstream scouring and deposited as point bars in the slackwaters within the bend. As the meander bend enlarges, it may form a loop which may be shortened or cutoff at the neck of the loop or at a chute channel.

Most point bars during low stage have a submerged arcuate ridge-like extension attached at the downstream end, which separates a slackwater portion of the stream from the deep part of the channel near the opposite shore. During high water, deposition takes place on the bar area and a ridge is developed. Vegetation growth stabilizes this bar and decreases the flow velocity such that it may trap more sediment. During the following low stage, the slackwater slough receives some filling of fine sediments carried in migration. As channel migration continues, sand accretion progresses and the slough may become blocked off from the river by bar growth, becoming a lake. As the bar grows, a series of alternating arcuate ridges and intervening swales is developed. The bar ridge gradually builds to flood stage height and as the accretions become further removed from the river, the sloughs fill with fine floodwater sediments.

Local relief on point bars may be as much as 15 ft. Ridges within a point bar area often mark the highest point within the meander belt, rising above the level of the crest of the natural levees on the opposite side of the channel. Large swales occur within the accretion topography which marks the stages in the downstream progression of meander loops. These swales vary from 500 to 1000 ft in width, with some reaching 1500 ft. Minor swales are generally associated with point bar deposits within meander loops. The majority of these swales are 100 to 500 ft wide, with some that reach over 1000 ft.

The natural levee is typically best-developed on the outside of river bends as a low, sloping, wedge-like ridge of sediments over a mile in average width, tapering into the adjacent lowlands. These levees are being constructed above the general level of the floodplain basins and are the topographic forms which cause the meander belt to stand up as an alluvial ridge.

Partial sorting of alluvium takes place when the stream overtops its banks. As this occurs, there is a decrease in velocity and transporting capability of the water which results in

rapid deposition of sediment. As the velocity of the water decreases, sand, being coarsest, is deposited initially and then is followed by silt and clay. The clayey backswamp sediment is deposited from still or slowly moving water in low area in back of the natural levees.

Other geomorphic features in the alluvial valley include crevasses, mid-channel islands, and alluvial fans. Levee crevassing and splay development generally occur on the concave part of the meander bend. The crevasse channels are in most cases incised and flow into the distal drainage networks which parallel the slope of the flood basin floor. Some islands are separated from one bank of the river merely by a chute channel which is dry, or nearly so, at low water. Minor streams with steep gradients which drained the local uplands have built very steep alluvial fans near the margins of the alluvial valley.

The alluvial banks of the lower Mississippi River are subject to continual erosion and migration. River bends normally tend to move downstream as the result of the progressive effects of bank erosion. Cutoffs occur as a result of the gradual erosion at and over the necks of bends. The rate and amount of bank caving in the lower river decreases as the mouth of the river is approached.

The present meander belt shifts rapidly downstream if it cuts into deposits of sandy point bars which offer little resistance (Fisk 1947). It encounters more resistance when it cuts into fine-grained deposits. Fine-grained bed and bank materials slow down the rate of meander migration. Bank recession of sandy deposits is a continual movement associated with a rapidly and regularly retreating bank with smooth shorelines. Fine-grained deposits recede by slumping, which results in irregularly scalloped banklines characterized by riverward-tilted blocks.

Geology and Geomorphology of the Project Area

The proposed project is a series of revetment segments for bank protection from Torras Landing to Raccourci Island, (from river mile 303 to 294 on the west or right descending bank of the Mississippi River in Pointe Coupee and West Feliciana Parishes, Louisiana). The site is located on the batture between the artificial levee and the Mississippi River. In the proposed project area, elevations range from over 60 ft (18 m) on the crests of artificial levees to 8 ft (2.5 m) in backswamps.

The geologic history of the proposed project area has been strongly influenced by sea level fluctuations in the Gulf of Mexico and by the shifting of the Mississippi River and its distributaries. Sea level fluctuations influenced the slopes, and therefore the load and channel characteristics, of rivers draining into the oceans. During lowering of sea level, the streams cut deep trench-like valleys; during the succeeding rising sea level these valleys were alluviated.

During the Wisconsinan or latest Pleistocene deglaciation, when sea level was approximately 300 ft (90 m) below present, the Mississippi Valley became deeply incised within coastal plain sediments (Fisk 1944). Sea level began to rise after the glacial maximum, between

20,000 and 17,000 years before present. During this glacial maximum, the Mississippi River north of the proposed project area had a braided pattern; a braided stream regime may have persisted as far south as the Gulf coast, but this has not been established with certainty (Saucier 1974).

The alluvial sequence shows an upward decrease in particle size, resulting, in part, from the progressive decrease in slope brought about from rising sea level and consequent filling of the valley. Fisk (1947) inferred that the deposits provide proof of a gradational reduction in the carrying capacity of the master stream, and that they reflect a great wave of alluviation which slowly spread upstream. Approximately 30 m of overbank clays and silts overlie an undifferentiated sand and gravel unit of late Pleistocene age. The clays of the Holocene section are divisible into a stack of alternating poorly-drained swamp, well-drained swamp, and lacustrine facies (Krinitzsky and Smith 1969; Coleman 1966).

Since sea level reached its present stand, approximately 5000 years ago, there has been little effective change in valley slope and no apparent change in the size of particles carried by the lower Mississippi River (Fisk 1947). The Mississippi River has shifted to a channel with a steeper gradient every 1000 to 1500 years during the Holocene. Each major course or belt of the Mississippi River is associated with a delta complex.

Fisk (1944) identified a meandering history for the Mississippi River in the presently occupied channel belt based on orientation of ridges and swales in preserved point bars. This segment of the modern channel in the proposed project area has been occupied for approximately 3000 years (Saucier 1974). Before then, the active channel belt was positioned along the western wall of the lower Mississippi valley and had a poorly developed drainage network which existed in the vicinity of the present channel belt (Fisk 1944). The natural levees in the vicinity of the proposed project area are the most highly developed anywhere along the Mississippi River (Fisk 1947). The difference in elevation between the highest point on the levee 38 ft (11.6 m above m.s.l), and the lowest point, 8 ft (2.5 m above m.s.l) in the backswamp (the adjacent flood basin to the west) is 30 ft (9.1 m). Based upon the maximum thickness of the levee and the age of the channel belt, the average sedimentation rate (the rate of levee accretion) is calculated as 0.12 in/yr (0.3 cm/yr) (Saucier 1969).

From upstream to downstream, the banks of the lower Mississippi River are composed of progressively finer deposits; meanders decrease in number; and the channel becomes narrower, straighter, and deeper. The last mid-channel island or towhead in the Mississippi River lies just above Donaldsonville and represents the approximate southern limit of low-water sand transfer by the river (Fisk 1944). The straightening of the river has been attributed to the thicker top stratum, the increase in the amount of backswamp clay in the delta plain, and the gentler low-water slope (Fisk 1944). The river thalweg shows a series of alternating riffles and pools that range from 15 to over 100 ft (5 to 30 m) in relief (Figure 3). The thalweg or thread of the stream follows first one bank and then the other. The pools and riffles show progressively lower elevations downstream to New Orleans. Some evidence shows that the bed of the lower Mississippi River has been aggrading in recent years (Watson 1982).

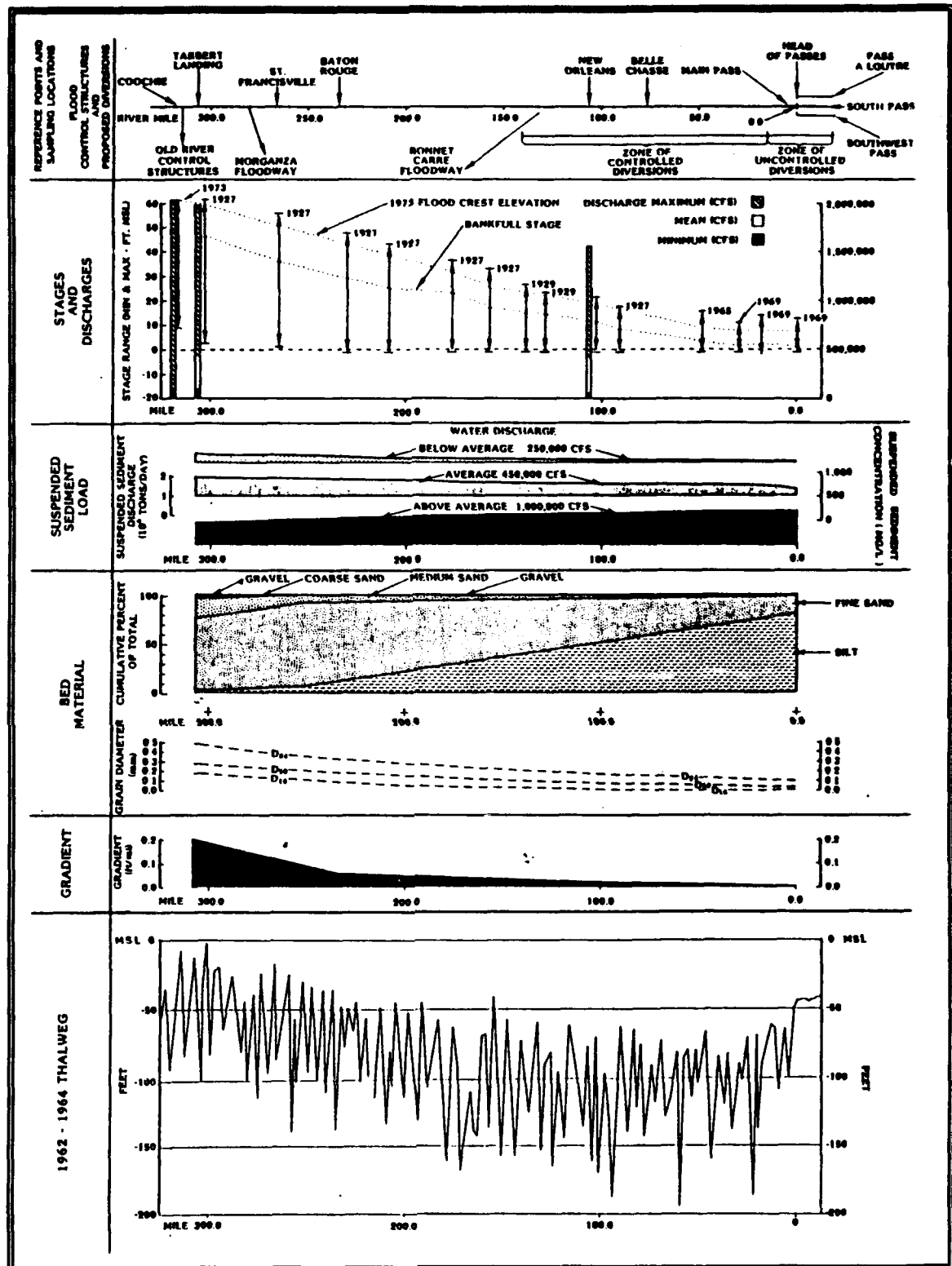


Figure 3: Physical characteristics of the lower Mississippi River. Source: Keown et al. 1977; USACE 1985; Everett 1971; Wells 1980; Meade 1987; and Mossa 1988.

In the proposed project area, there are few clays plugs and few cutoffs. Channel migration is locally faster where the Mississippi River is reworking the deposits of Thompson's Creek, which introduces gravels and sand to the river. These coarse deposits have been transported downstream as far as below Baton Rouge. Overbank sedimentation in unconfined reaches of the Mississippi River, i.e. those without artificial levees that would confine floodwaters, is appreciable during high discharge years. In the flood of 1973, sedimentation averaged 86 cm on point bars, 53 cm on natural levees, and 1.1 cm in the backswamp in such reaches (Kesel et al. 1974).

Some evidence also suggests that sedimentation in confined reaches could possibly exceed that of unconfined reaches because they are subject to flooding on a more frequent basis. Elliott (1932) noted that the levees could confine and cause deposition of the river sediment, which would reduce the cross-sectional area of the flood channel within a short time. He noted that information regarding the amount and distribution of the levee battures is meager, and synthesized the results of previous studies which show sedimentation as thick as five feet in less than a ten-year period near Memphis and one to three feet in some other places. More recently, Saucier (1983) and Mossa (1989) have reported sedimentation of two to four feet since the seventeenth century on the batture along the lower Mississippi River south of New Orleans.

Pointe Coupee Parish contains near-surface sediments deposited by both the Mississippi and Red River systems (Lytle 1968). Most of the parish is dominated by sediment of Mississippi River alluvial origin. In the northern part of Pointe Coupee Parish, the sediment deposited by the Red or Arkansas River has been covered by more recent sediment deposited by the Mississippi River (USDA 1982). In this area, some of the soils have reddish brown sediments deposited by the Red River in the lower part of the subsoil.

Mineralogical studies of the Mississippi River alluvium indicate that smectite minerals are predominant in the clay-size fraction, with secondary amounts of micaceous clays (Brown et al. 1970). Associated with these are lesser amounts of kaolinite, chlorite-vermiculite intergrade, and quartz minerals. The sand and silt-sized fractions are made up largely of quartz with a sizeable component of feldspars and weatherable minerals including biotite and hornblende. Mississippi River sediment also does not have detectable quantities of calcium carbonate when it is deposited.

In comparison, the Red River contains less smectite and more micaceous clay in the clay-sized fraction and does contain calcium carbonate at the time of deposition (USDA 1982). The Red River alluvium has a reddish color attributed to oxides of iron associated principally with the clay-size fraction. Reddish Permian age formations exposed in the western parts of the drainage basin in Oklahoma and Texas are the major source of this sediment.

The principal soil map unit in the project area on the levee batture is the Robinsonville-Commerce association (USDA 1982). These soils have developed in areas between the artificial levees and channels of the lower Mississippi and Atchafalaya Rivers and inside the Morganza

Floodway in the alluvial valley (Figure 4). The Robinsonville series consist of well-drained soils formed in loamy and sandy alluvium, mainly on the batture side of the levee next to the Mississippi and Atchafalaya Rivers. Slopes range from 0 to 3 percent. The Commerce series consist of somewhat poorly-drained soils that formed in loamy alluvial sediments developed on intermediate and high positions on natural levees. Slopes range from 0 to 3 percent.

The Robinsonville soils are Typic Udifluvents with coarse-loamy textures (< 18% clay and > 15% sand) and mixed mineralogy, where no one clay mineral dominates the clay-size fraction. The Commerce series are Aeris Fluvaquents with fine-silty textures (< 35% clay and < 15% sand), and mixed mineralogy, where no one clay mineral dominates the clay-size fraction. The Robinsonville-Commerce map unit consists of about 60% Robinsonville soils, 30% Commerce soils, and 10% soils of minor extent. The soils in the proposed project area, which are between the Mississippi River and protection levees, are frequently to occasionally flooded. The Robinsonville is one of the less common soils in the lower Mississippi River alluvial area, making up 0.7% of the area, while the Commerce is the second most common, found on 14.6% of the region (Schumacher et al. 1988).

Soil map units that occur landward of the artificial levee in the vicinity of the proposed project area include the Commerce-Bruin-Convent, a loamy soil association along crevasses and other channels and the Sharkey series, which is mapped as three flooding classes: seldom-flooded, occasionally-flooded, and frequently-flooded (USDA 1982). Areas of Sharkey soils that are frequently-flooded coincide with areas mapped as Lake Moreau and Round Lake on McCulloh's 1859 Surveyor General Map (Figure 5). It is likely that these areas were ponded more frequently before the artificial levees were built.

Other Streams in the Vicinity of the Project Area

Bayou Lettsworth is an abandoned course of the Red River that has since received sediment of the Mississippi River system. The meander geometry of this bayou suggests that this was deposited by a meandering stream, but not one the size of the Mississippi. Soils along Bayou Lettsworth are mapped as Commerce-Bruin-Convent, but may contain Red River sediment in the lower part of the control section. Fisk (1944, 1952) hypothesized that this was an ancestral Red River channel, abandoned between the fourteenth and sixteenth centuries. Saucier (1969) maps Bayou Lettsworth as an abandoned distributary along with another channel east of Round Lake.

Bayou Latenache, which drains from northeast to southwest from Raccourci Island, was also mapped by Saucier as an abandoned distributary. This channel becomes buried by sediments near the Morganza Floodway. It is incised, unfilled, and the soils flanking it are principally loamy, i.e. Commerce-Bruin-Convent, instead of clayey.

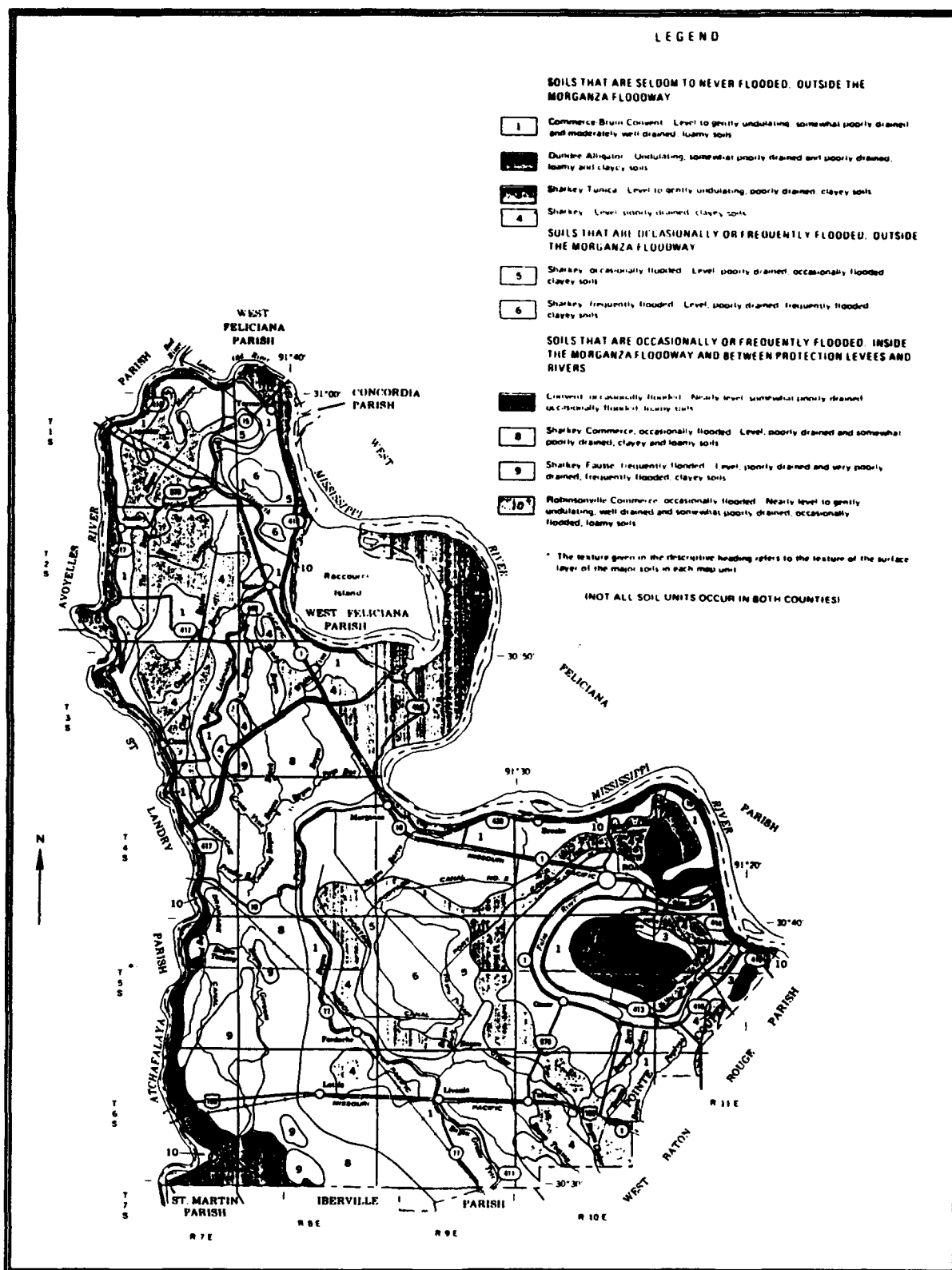


Figure 4: General soils map of Pointe Coupee Parish. Source: USDA 1982.

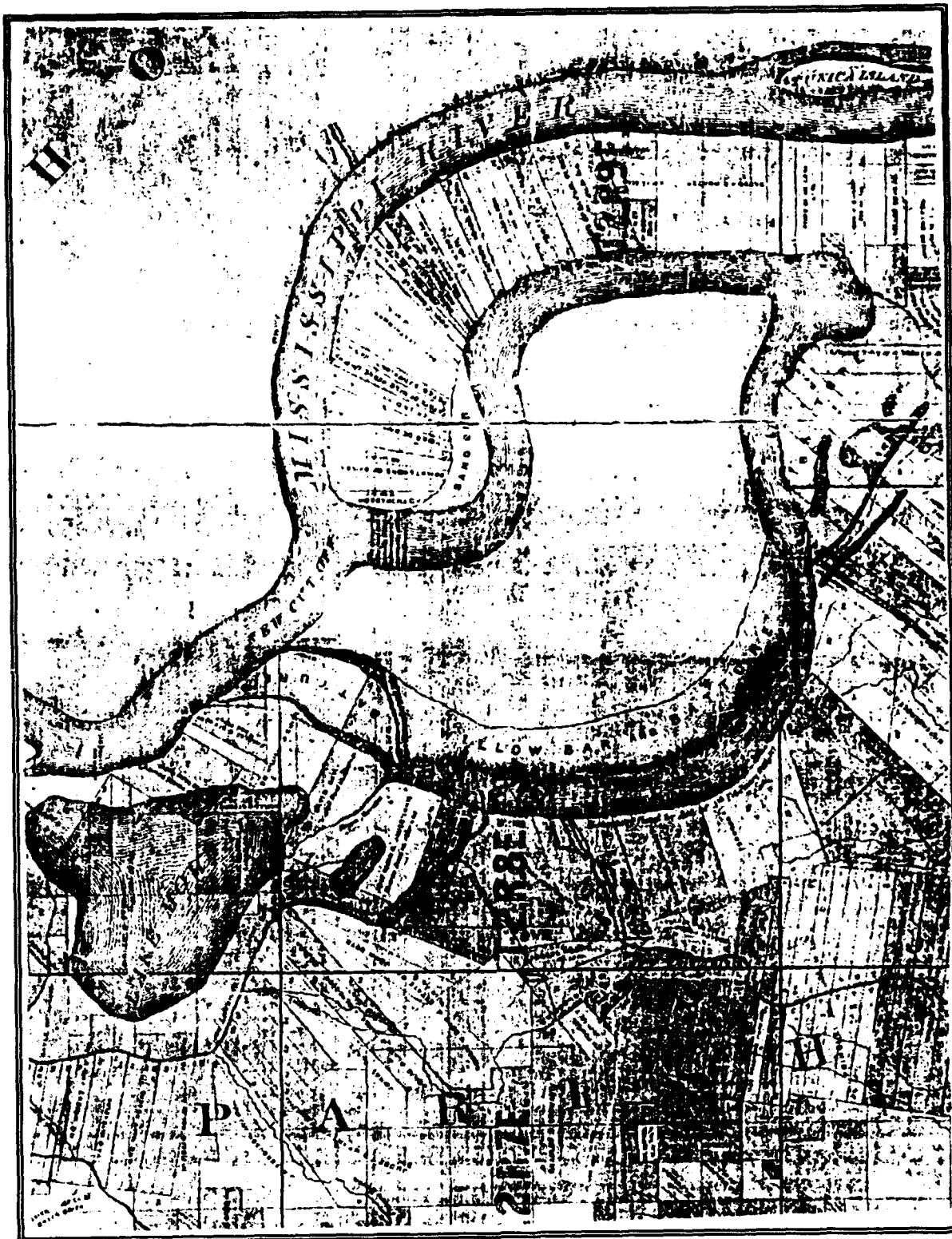


Figure 5: Detail of 1859 general survey map of Louisiana. Source: Louisiana State Library.

Bayou Moreau and several smaller streams flow southward through the lower-lying backswamp between the ancestral Red River (Bayou Lettsworth) and the modern Atchafalaya. These are mapped as the Sharkey series, seldom-flooded, although Commerce-Bruin-Convent soils and soils developed in Red River alluvium occur along parts of these streams. They may have developed initially as crevasses, but are now tributaries to the Atchafalaya basin. Since these bayous that flow through the backswamp are low-lying, they were not major courses or distributaries of the Mississippi or the Red Rivers, but have received overbank sediment from both.

Channel changes since human occupation of the proposed project area have been quite extensive. Fisk (1944) reconstructed the geomorphic history for the upper portion of the proposed project area (Figure 6). He hypothesized that in the fourteenth century, the courses of the Mississippi River and Red Rivers were close in this area. Just south of this reconstruction, in the vicinity of the upstream part of Raccourci Island, is where the Red River joined the Mississippi River. This course was abandoned by the sixteenth century, and the channel is now occupied by Bayou Lettsworth.

The Atchafalaya River also formed in the sixteenth century when a westerly migrating meander of the Mississippi River intercepted the course of the Red River and captured its drainage. For years it remained an insignificant distributary of the Mississippi River because it was choked on its upstream end by a log jam on the outer end of Turnbull's bend, where the Red River flowed into the Mississippi. The Atchafalaya now has numerous tributaries and its flow is about one-third that of the Mississippi.

Cutoffs of the Mississippi River near the Project Area

Three bends in the vicinity of the proposed project area were cut off in the eighteenth and nineteenth centuries (Elliott 1932; Ferguson 1940). In 1722, in the vicinity of mile 260 to 257 AHP, a bend was cut off by natural processes to form False River. The cutoff at False River shortened the Mississippi River by 21 miles. Two other bends were artificially cut off by settlers in 1831 and 1848.

Lower Old River was formed in 1831, when Henry Shreve ordered the channel at Turnbull's bend to be dug to shorten the course of the Mississippi. Soon afterward, the upper portion of the meander loop filled, leaving only the lower course (i.e. Lower Old River), connecting the Mississippi with the Red and Atchafalaya Rivers. The cutoff in the vicinity of mile 304 to 302 AHP, which was made in 1831 is known as Shreve's Cutoff. The artificial cutoff shortened the distance of the river by 15 miles (Elliott 1932).

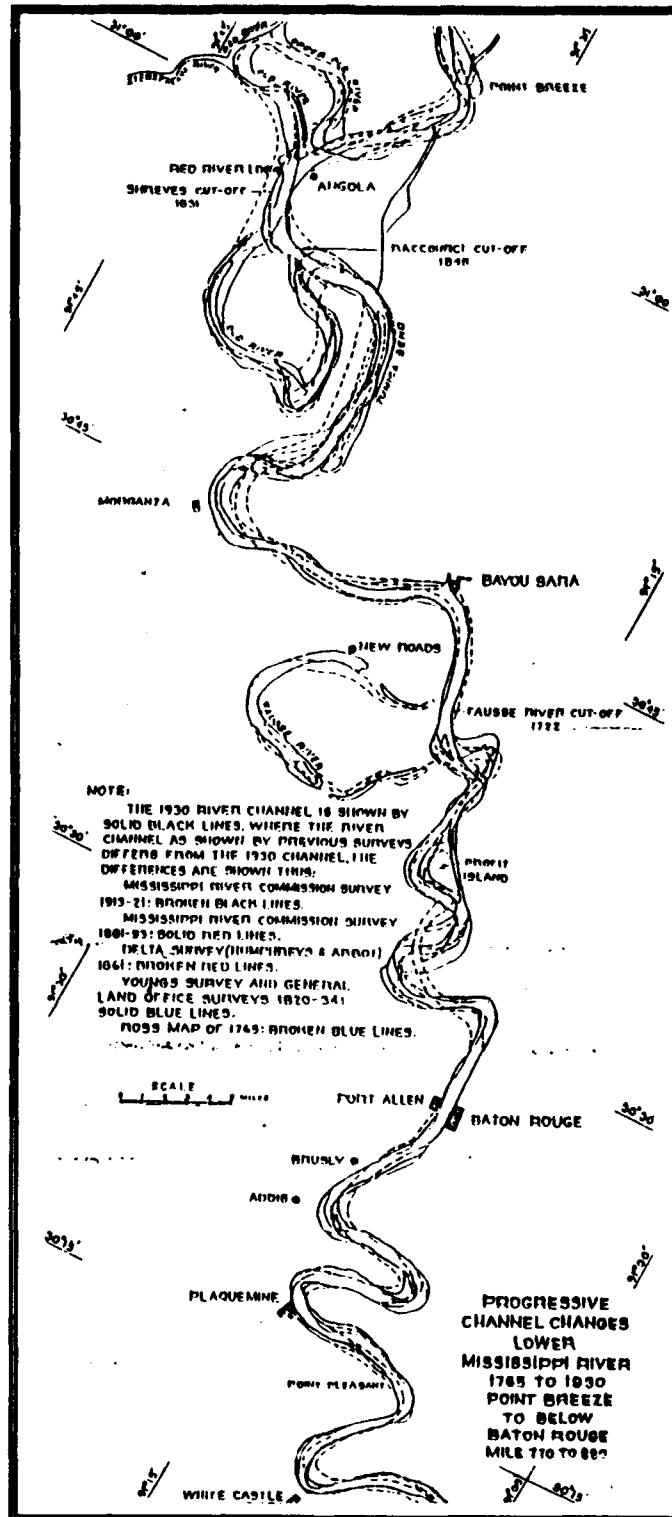


Figure 6: Progressive channel changes of the lower Mississippi River 1765 to 1930. Point Breeze to below Baton Rouge. Miles 770-880. Source: Elliott 1932.

Shreve's cutoff did not eliminate shoaling; it merely transferred the zone of shoaling to a new location on the Mississippi. Since 1831 Old River has been the site of almost continual trouble in the maintenance of navigation, because the upper end of the old channel has closed off entirely and the lower end is almost filled with silt and closed off sometimes. This separated the Red and Atchafalaya Rivers from the Mississippi, and caused the Atchafalaya to become a continuation of the Red River. Had Shreve's cutoff not been made, it is possible that the removal of the Atchafalaya raft would have been followed by diversion of the Mississippi River discharge.

In 1839, the State of Louisiana began to burn, blast, and dredge the log jam on the Atchafalaya. Flow through the connecting link changed from a situation where reversals occurred depending on whether flow was higher in the Mississippi or the Red River to a situation where the Atchafalaya continued to enlarge by receiving progressively greater amounts of flow from the Mississippi River. This enlargement could result in diversion or capture of most of the Mississippi River by the Atchafalaya River.

During 1848, the Raccourci Cutoff was made by the state of Louisiana in the vicinity of mile 300 to 295 AHP (Figure 7). It shortened the river a distance of 19 miles, but failed to produce any improvement in navigation in the channel upstream (Elliott 1932). The capacity of this cutoff, when initially opened, was only 10% of the total discharge (Ferguson 1940). In the following low water stage, less than 40% passed through the cutoff with the remaining 60% passing around the bend.

Despite human intervention to maintain channel stability and the integrity of the artificial levee, the Mississippi River has migrated significantly in some sections of the proposed project area. Published maps show that the courses of the rivers in the proposed project area have changed appreciably. Figure 8 shows the change between 1731 and the 1930's Mississippi River Commission Survey (Ford 1936). Figure 9, compiled from different sources, shows progressive changes of the lower Mississippi River from 1765 to 1930 in the proposed project area (Elliott 1932). This project report contains overlays of a series of hydrographic surveys compiled from 1879 to 1983-85 that show channel changes in the proposed project area (Figures 10-13). The river in this reach is quite dynamic, due in part to adjustments of the cutoffs. The channel has migrated 4000 ft in places during this period and has developed changes in the size and morphology of a number of mid-channel islands.

Other Engineering Modifications in the Vicinity of the Project Area

The history of man-made structures in the Mississippi River valley dates back several centuries, beginning with artificial levee construction. Shortening of the river by cutoff of meander loops, channel dredging, and revetment construction soon followed. Recently, several major projects have been constructed in the proposed project area to maintain the present course of the Mississippi River by regulating flow between it and the Atchafalaya.

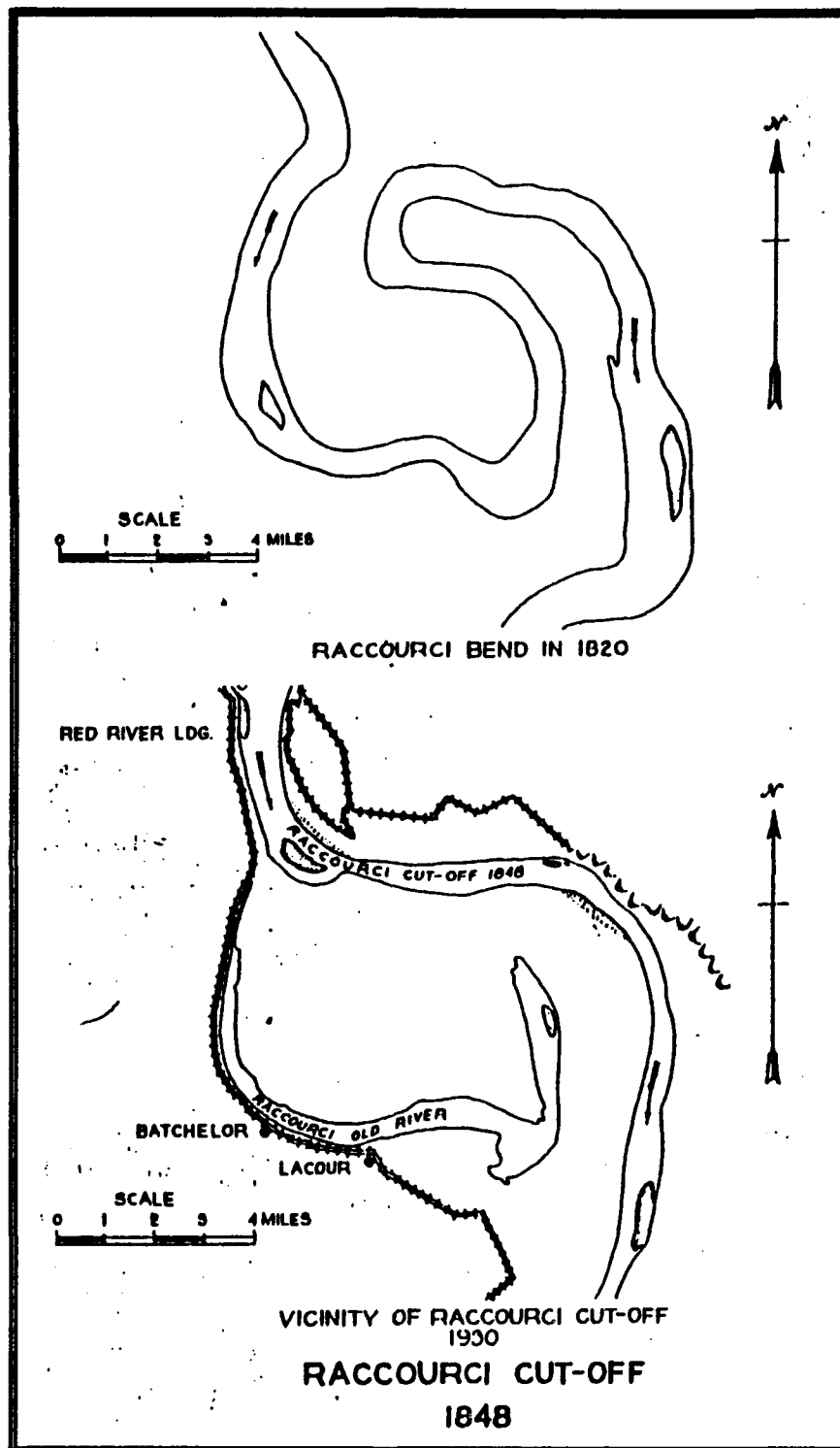


Figure 7: Channel changes in the vicinity of Raccourci Cutoff, 1820-1930. Source: Elliott 1932.

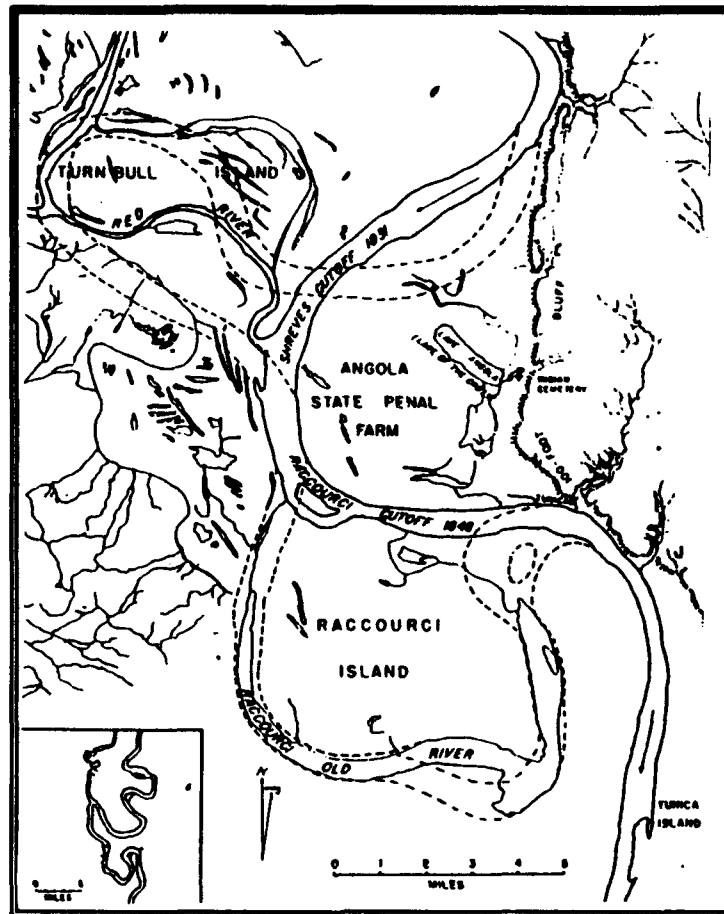
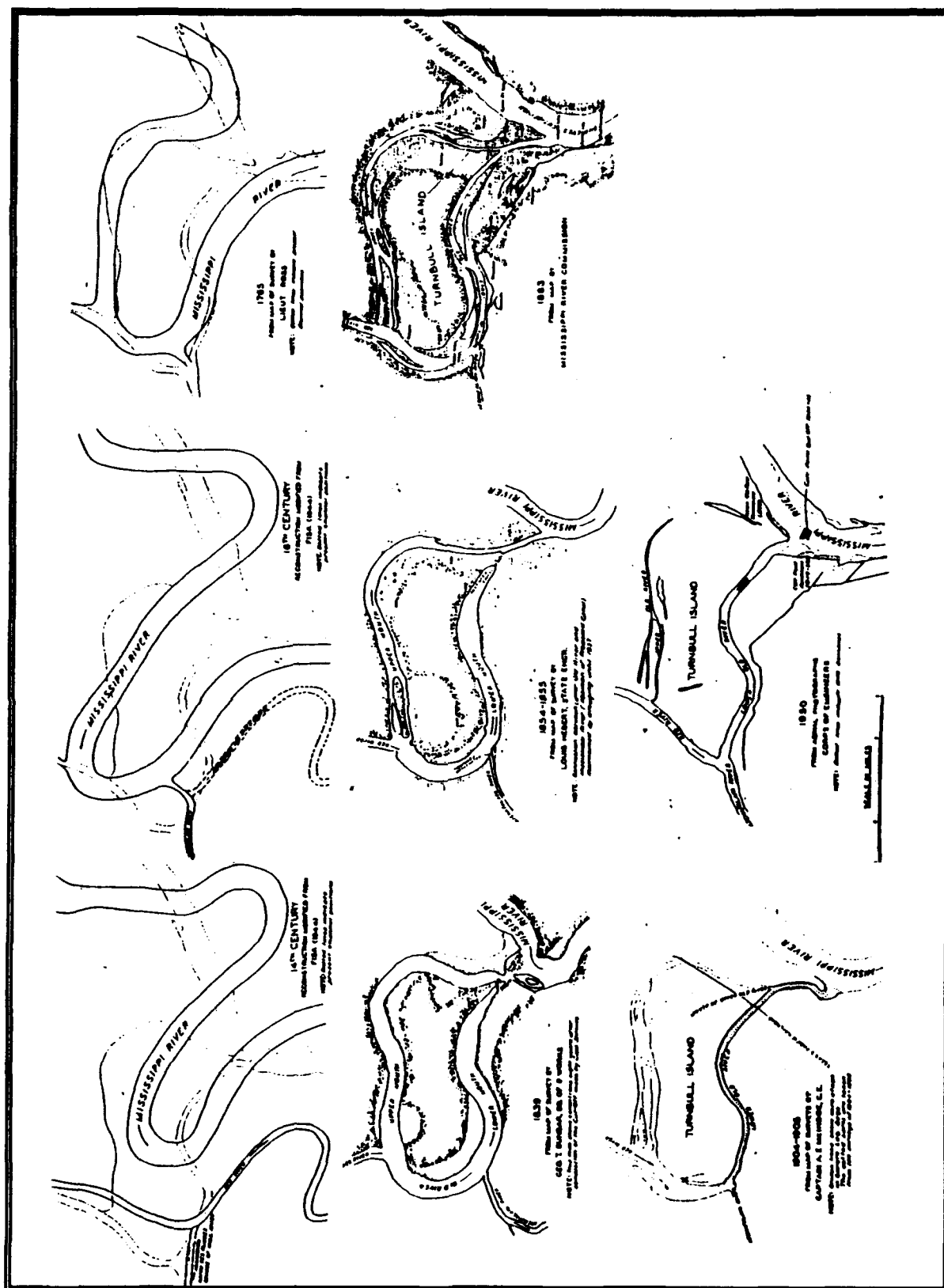


Figure 8: Channel changes in the vicinity of Turnbull and Raccourci Islands. Source: Ford 1936.

According to Elliott (1932), New Orleans was the location of the first artificial levee, built in 1727, on the Lower Mississippi River. By 1812, the levee system on both sides of the river extended to Baton Rouge on the left bank, and to the vicinity of Morganza on the right. Crevasses through these levees were a common occurrence during these earlier years.

With the completion of more and larger levees, flood stages reached new heights. New Orleans was inundated several times and there was considerable concern that the river bed was being silted in between the levees. It was soon recognized, however, that these new flood heights were a natural result of confining the river between levees. Where the river had formerly been allowed to spread out across the floodplain, thereby lowering stages, it was now confined to a narrow zone between the artificial levees.



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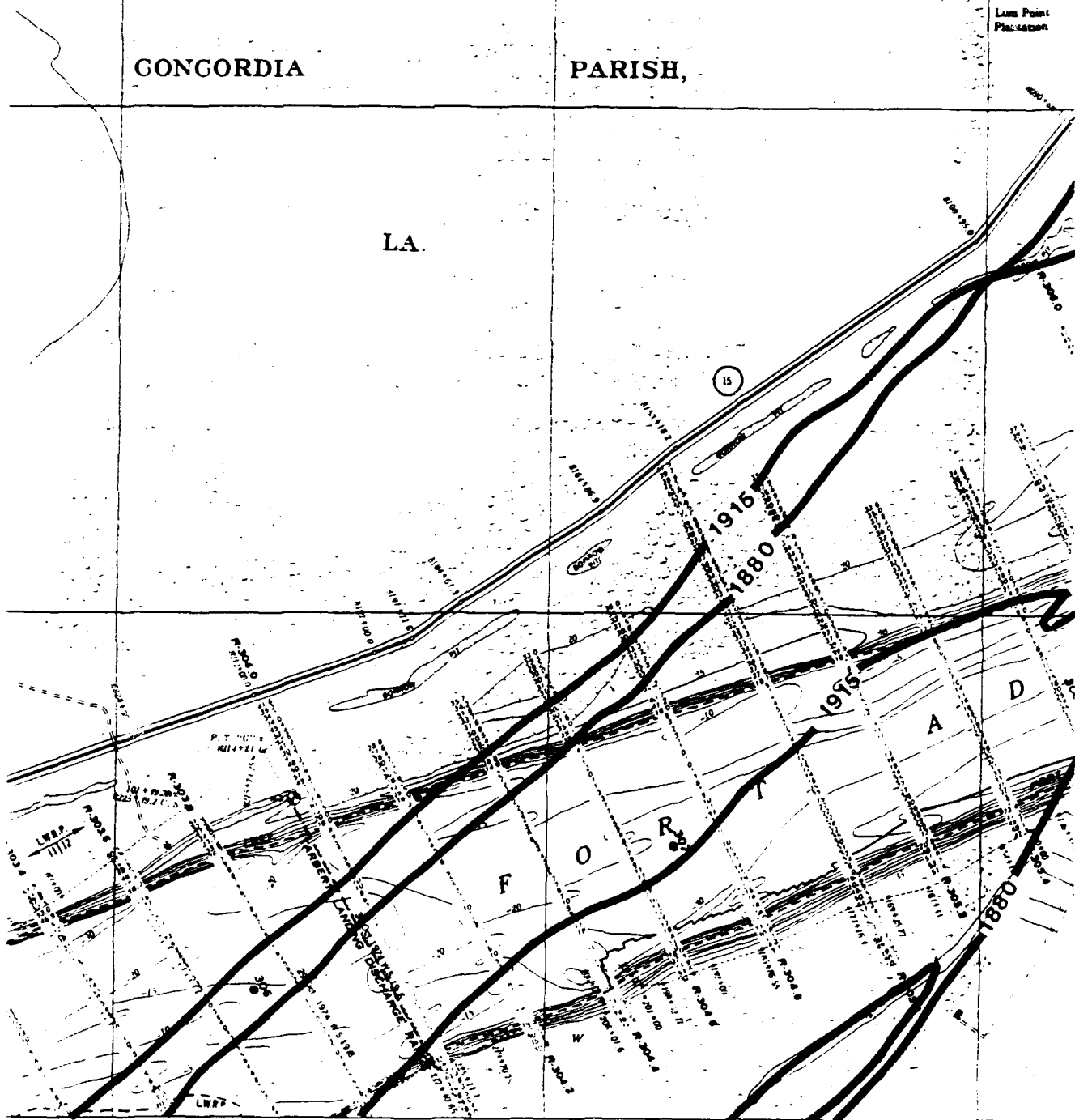
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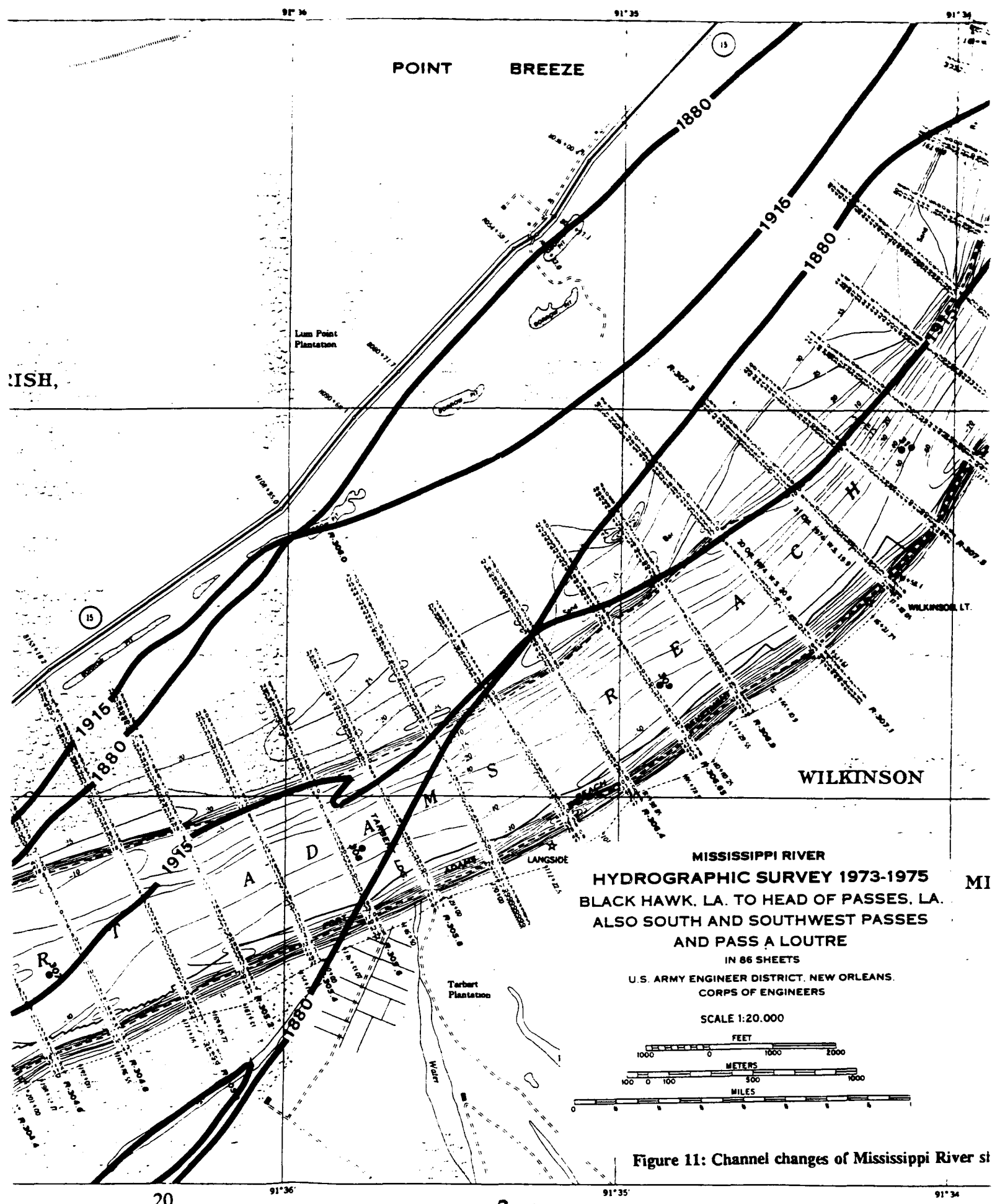
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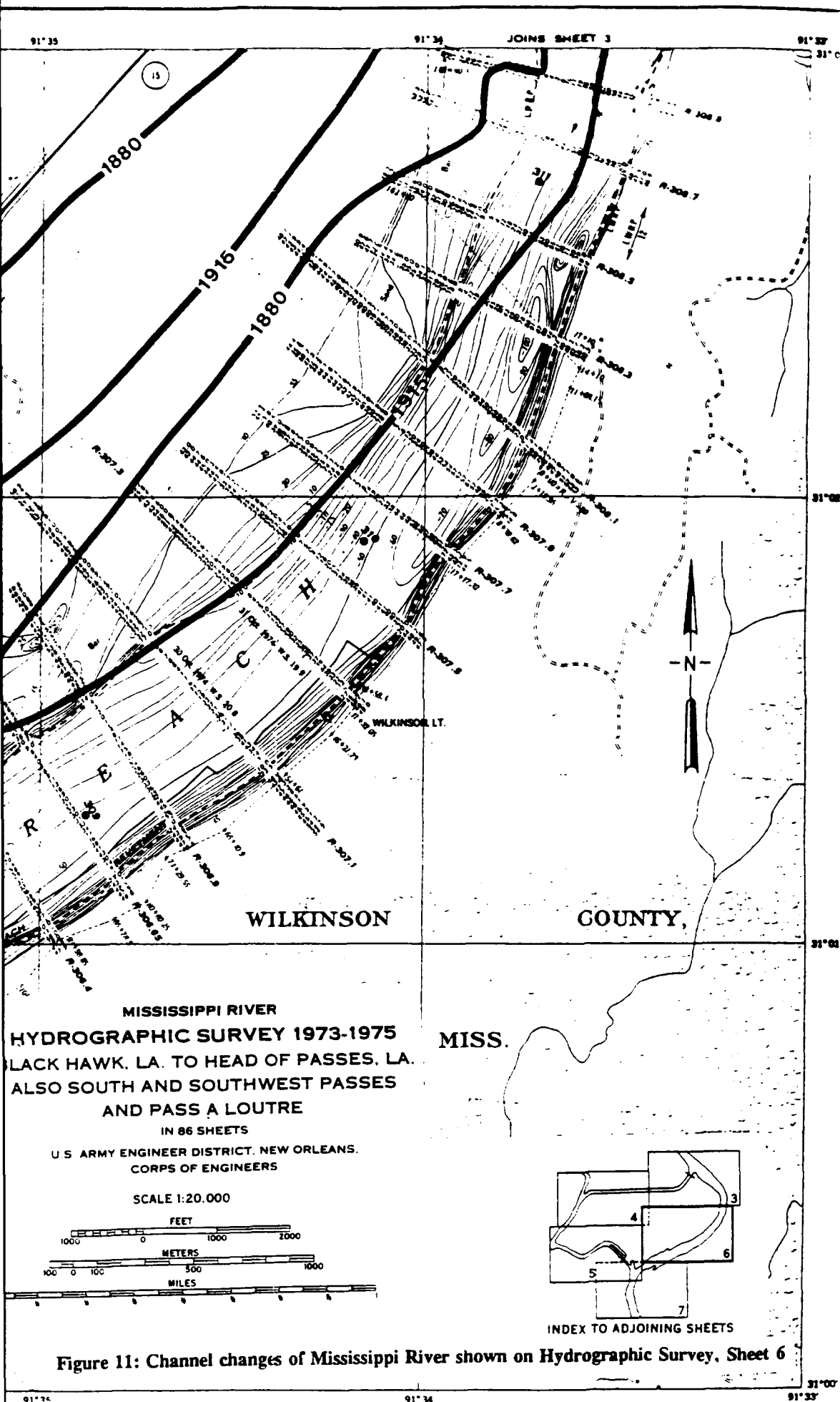


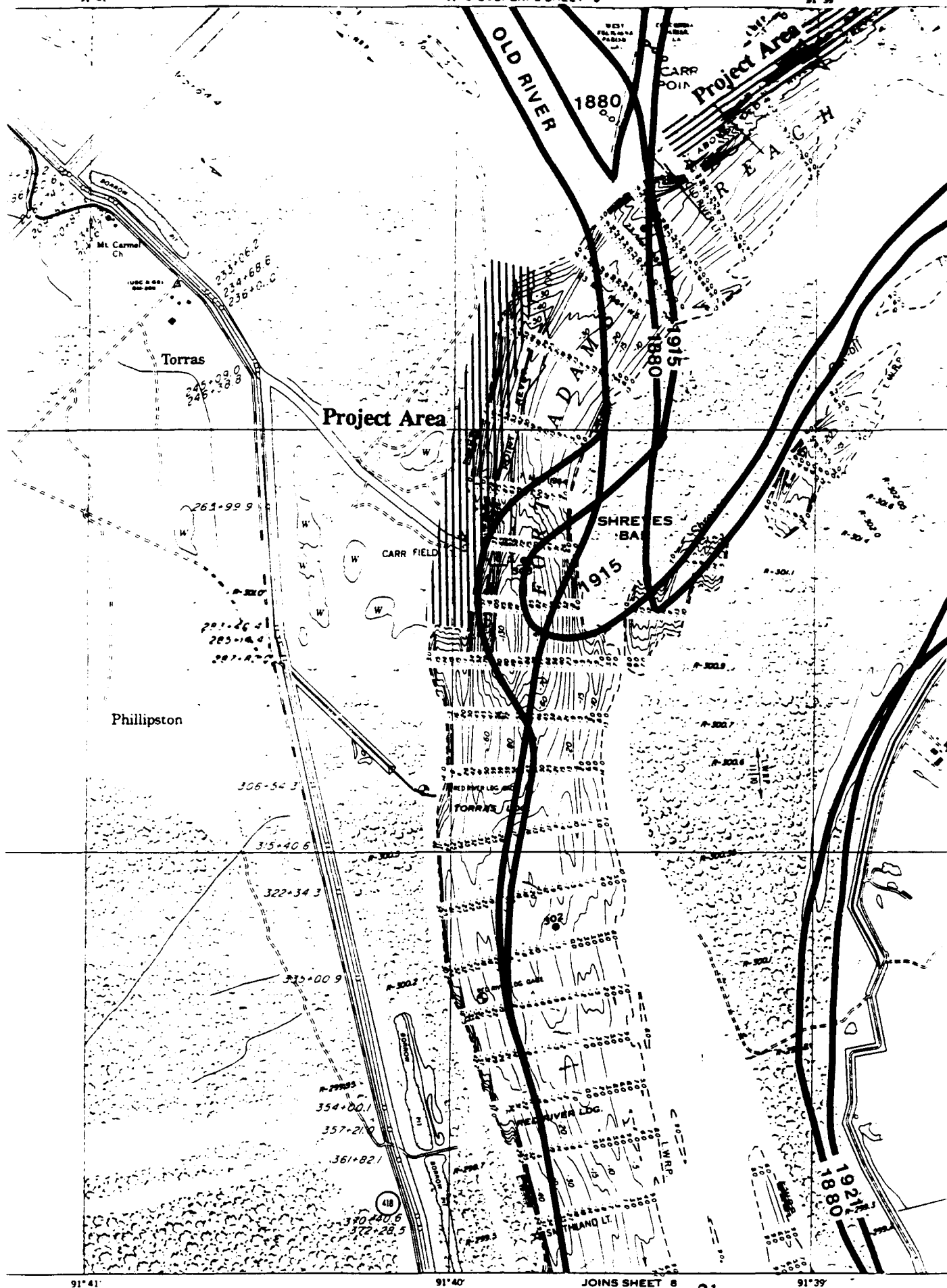
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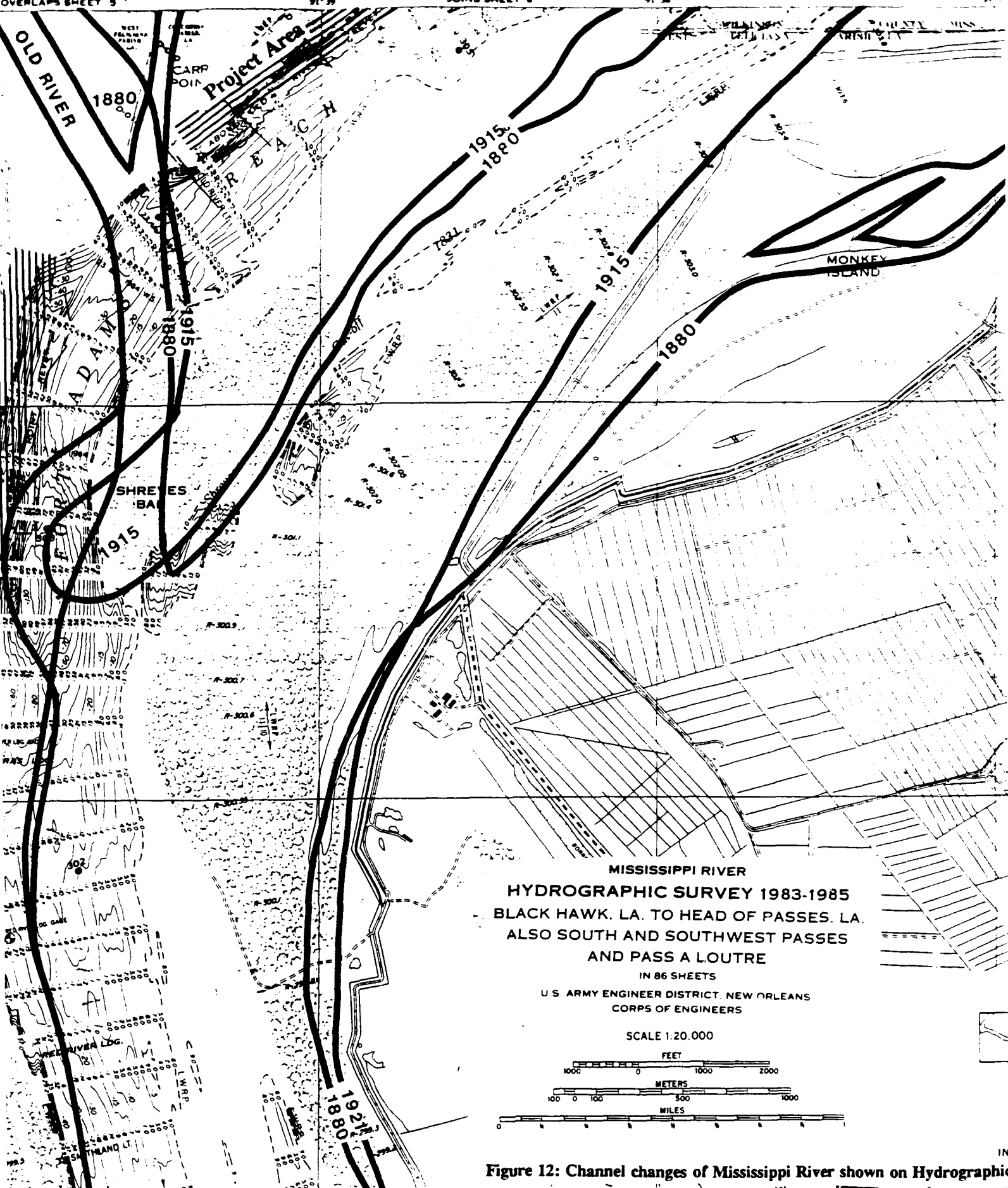
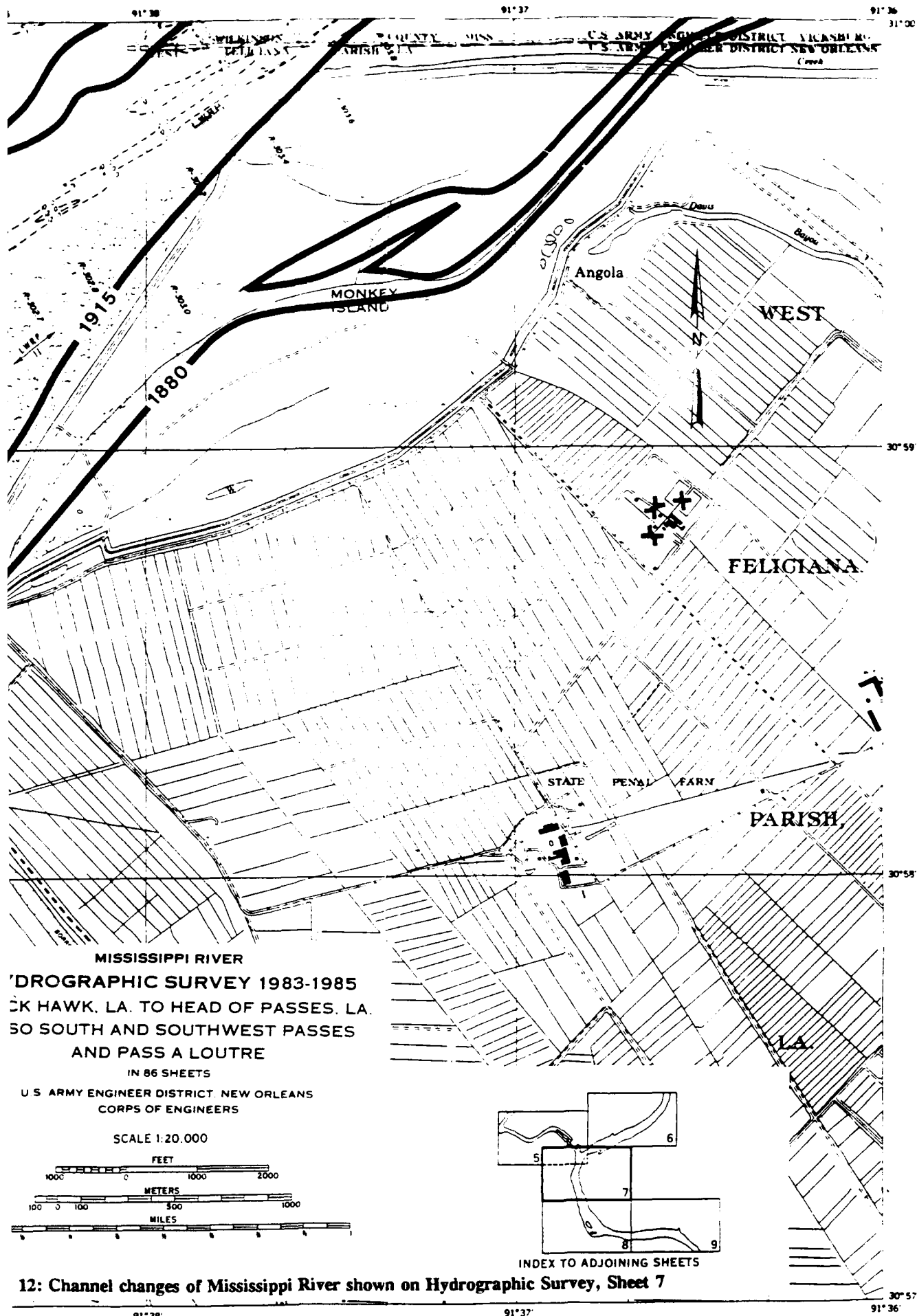


Figure 12: Channel changes of Mississippi River shown on Hydrographic

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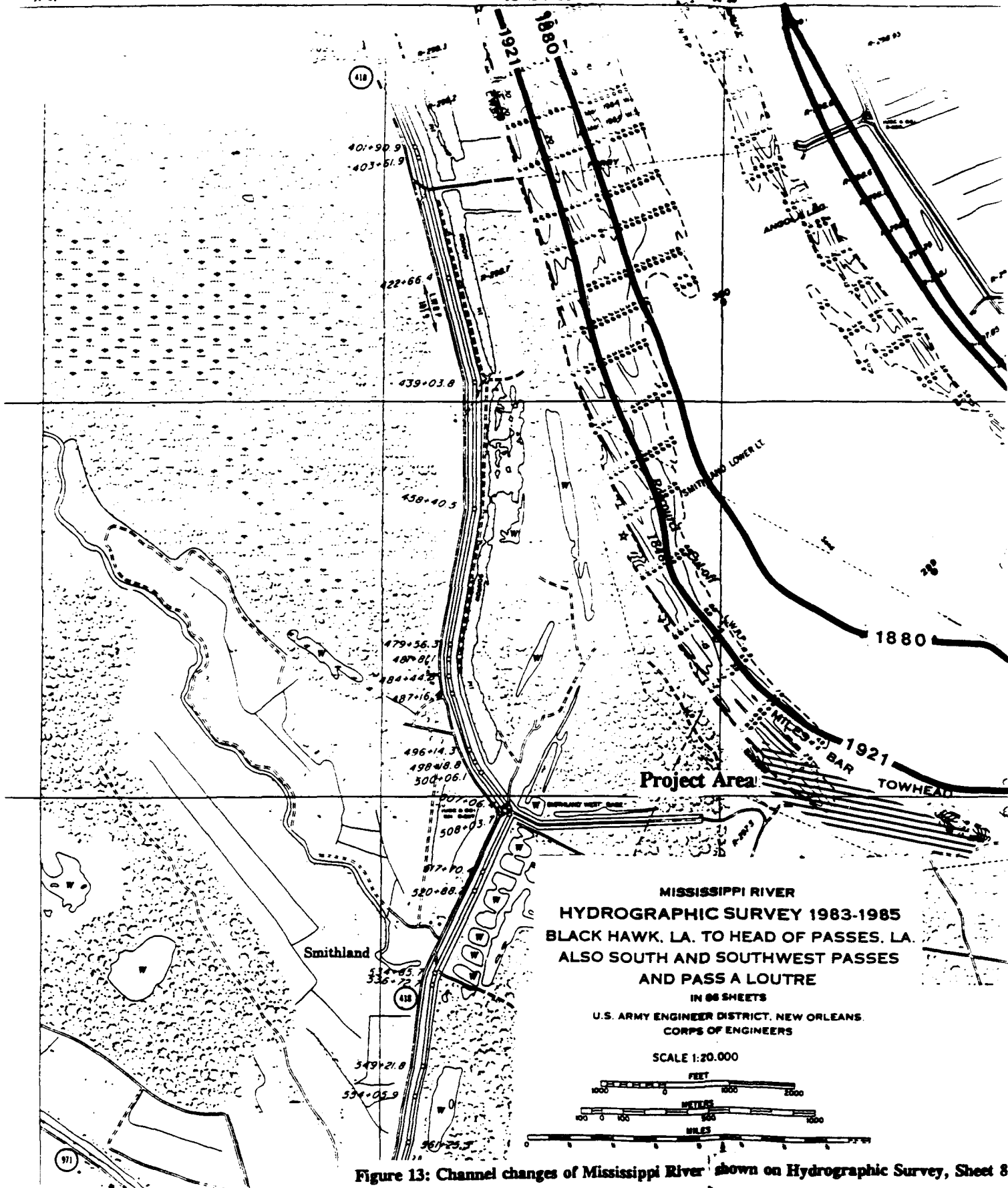
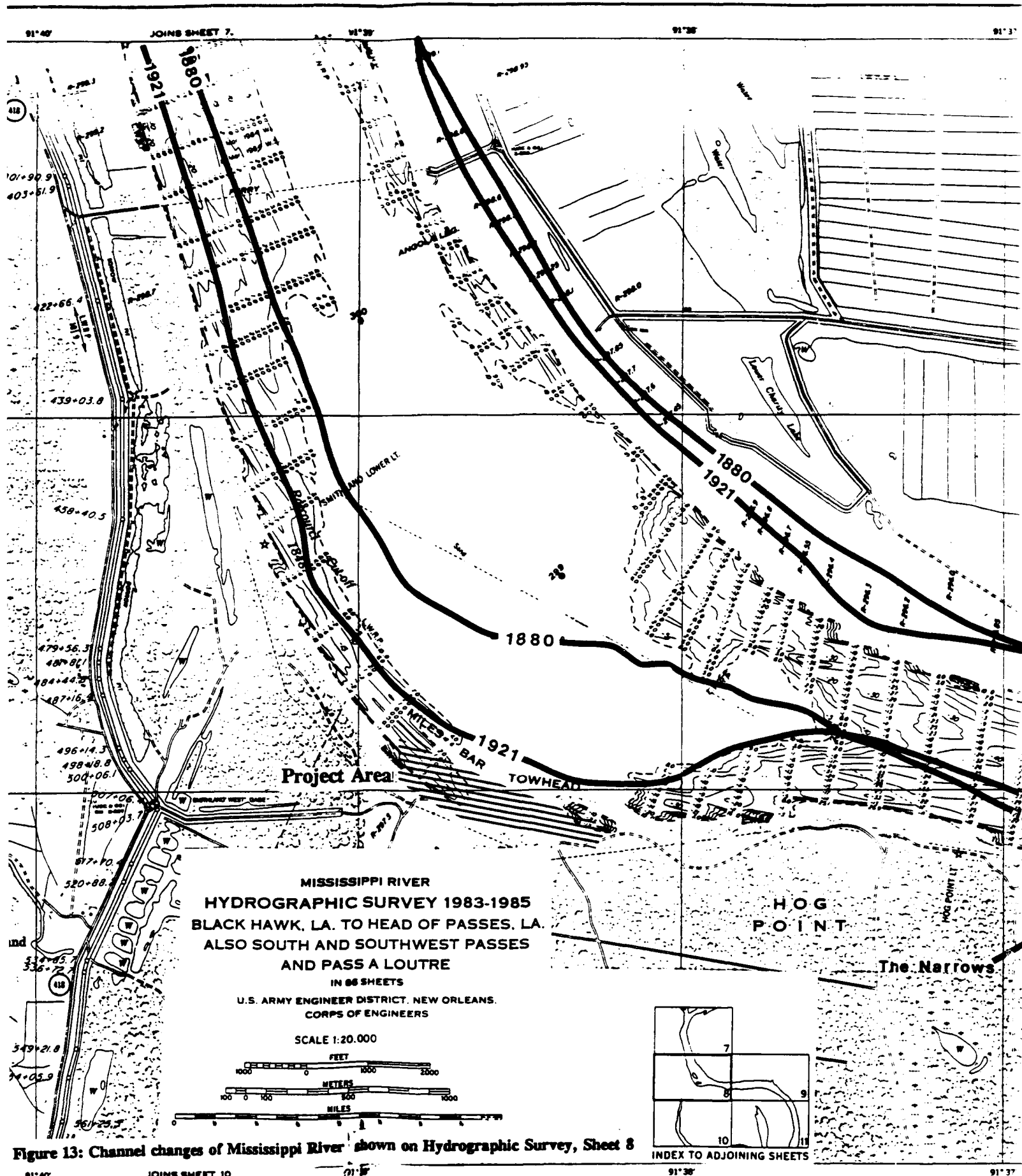
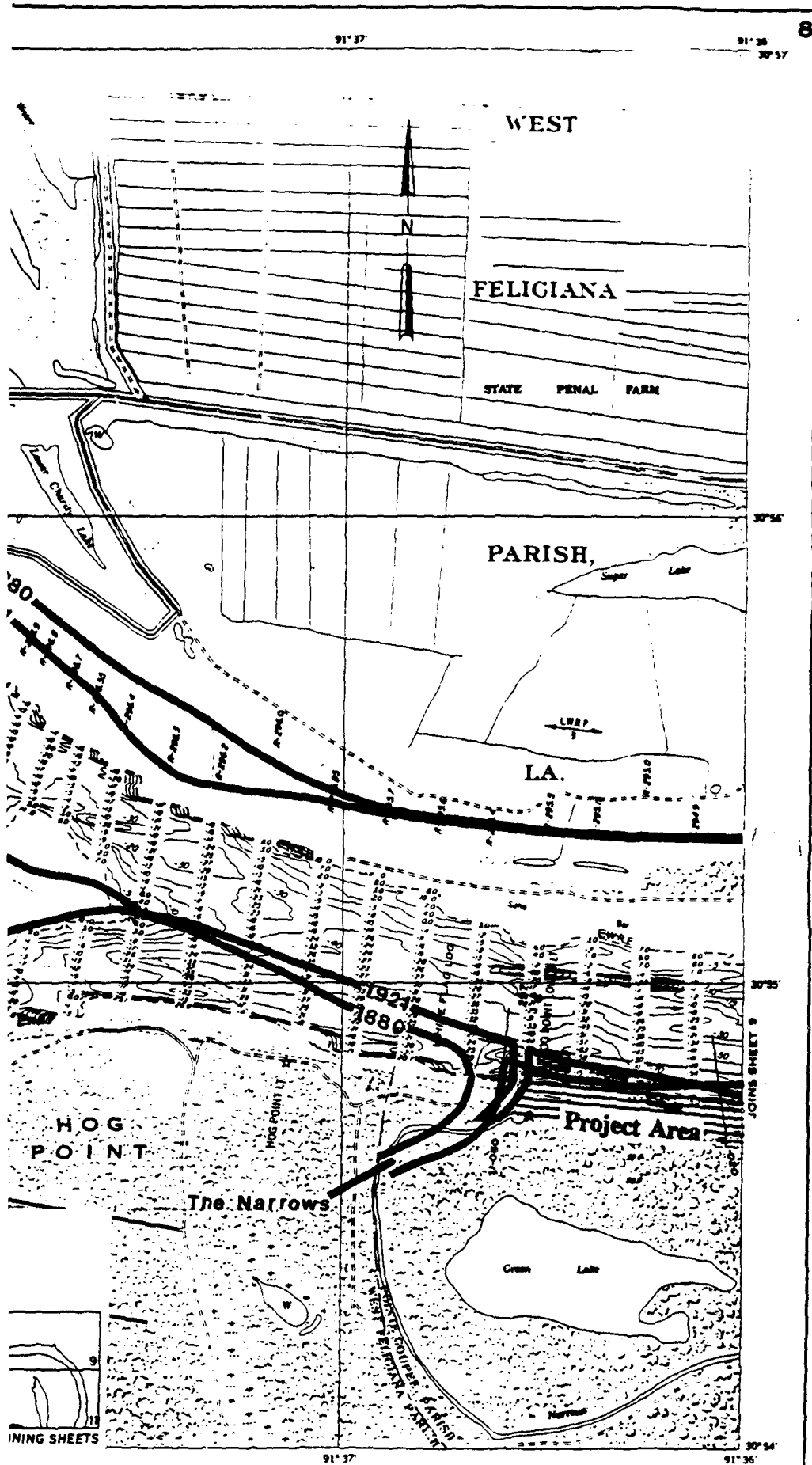


Figure 13: Channel changes of Mississippi River shown on Hydrographic Survey, Sheet 8





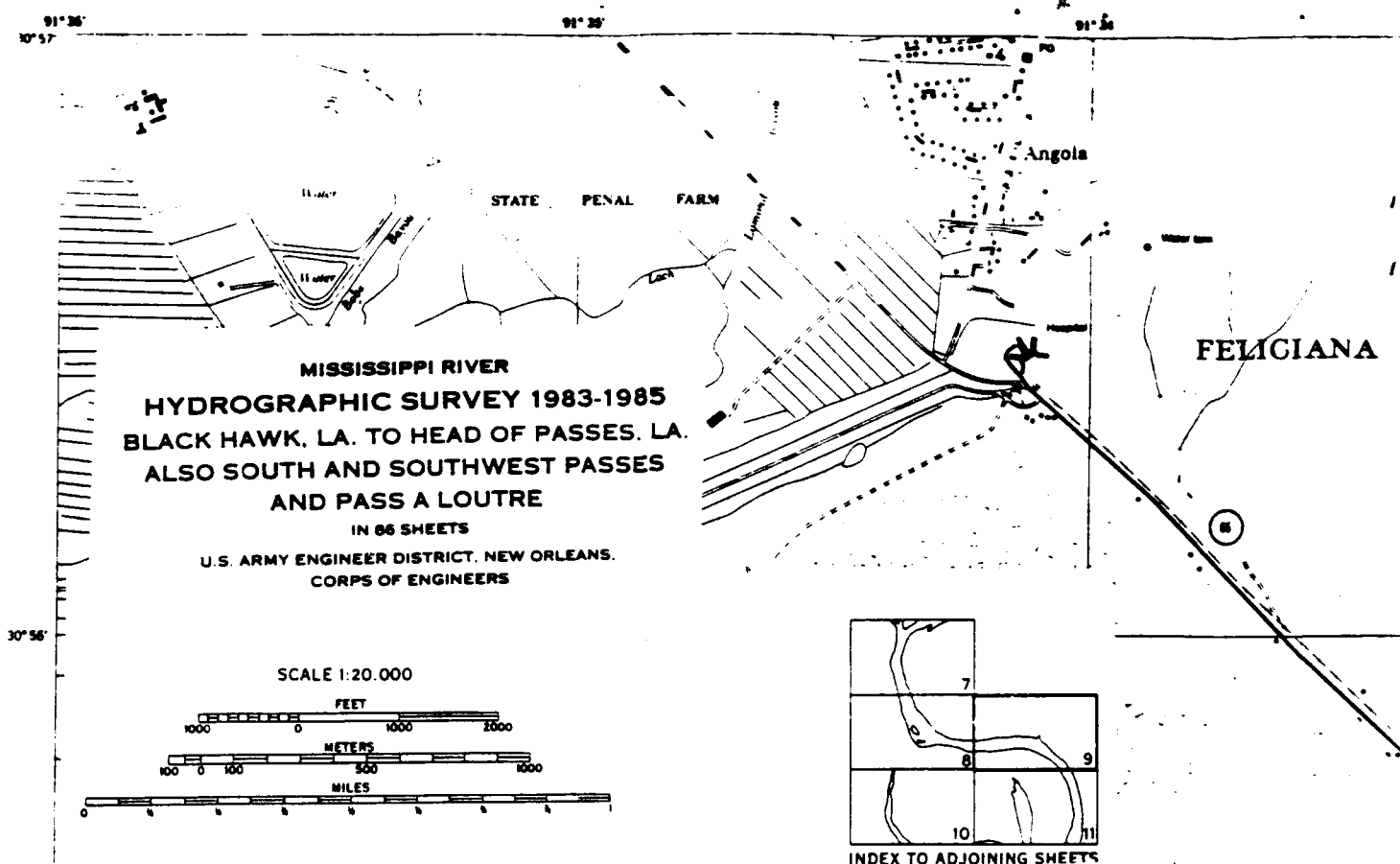
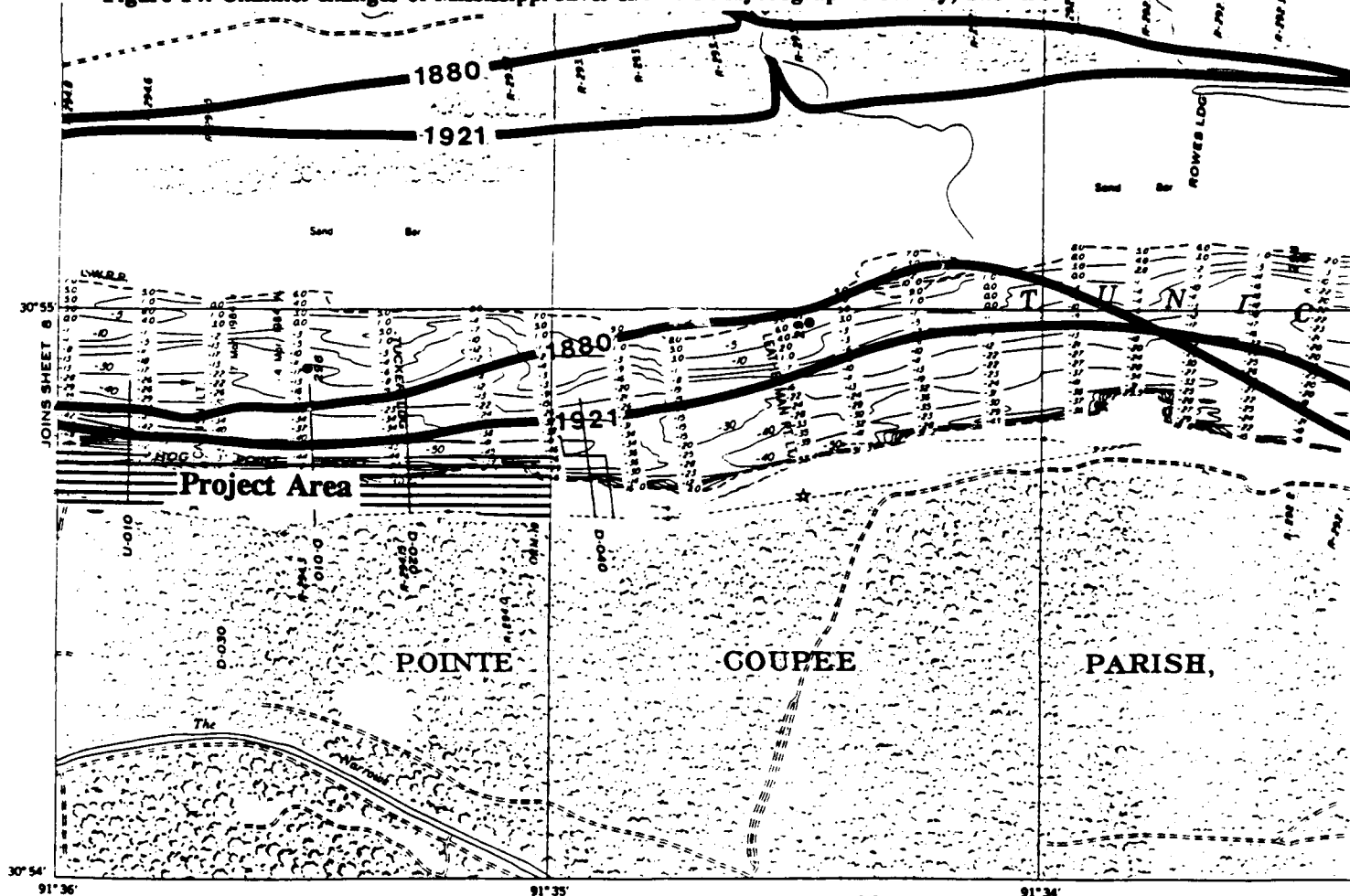
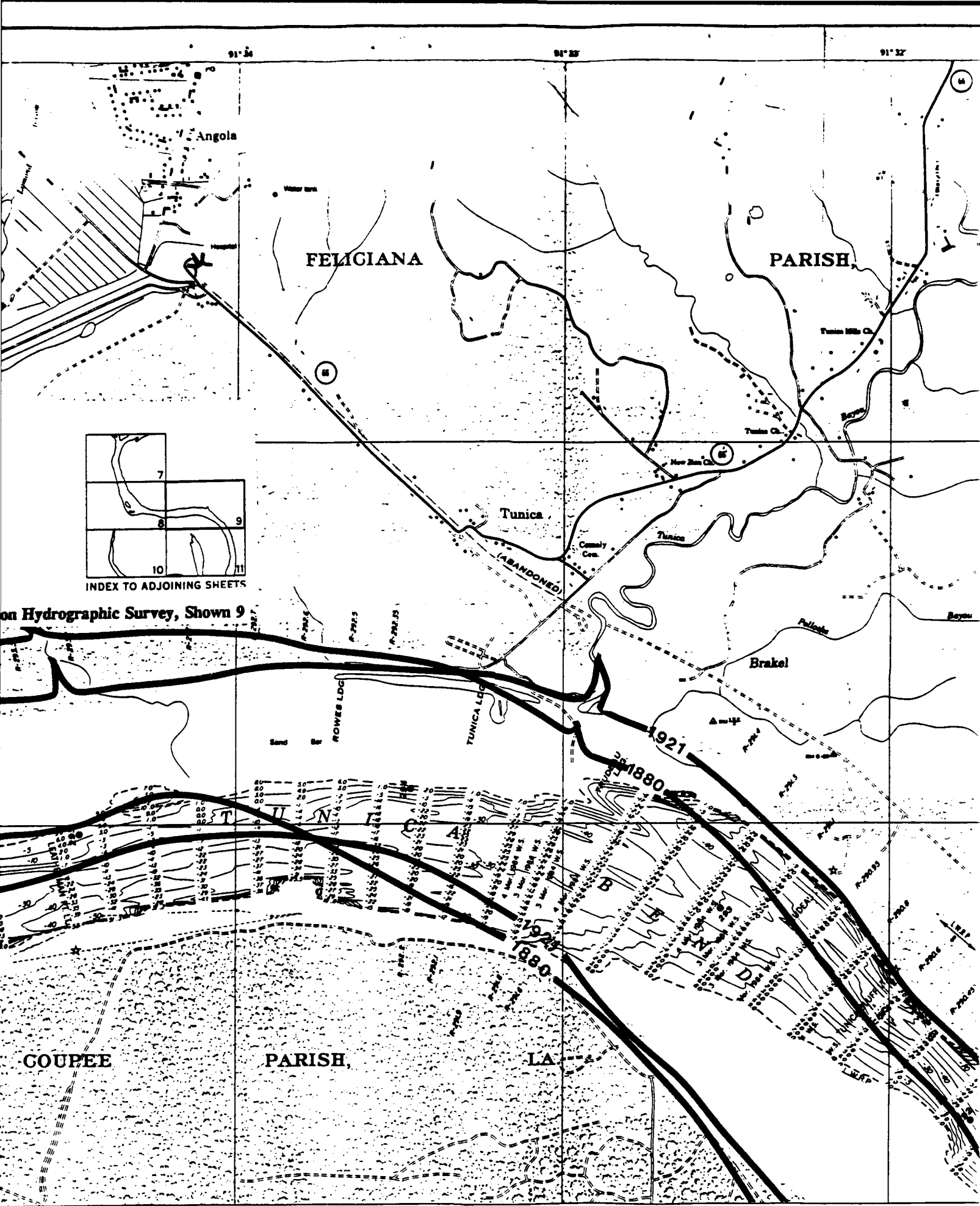
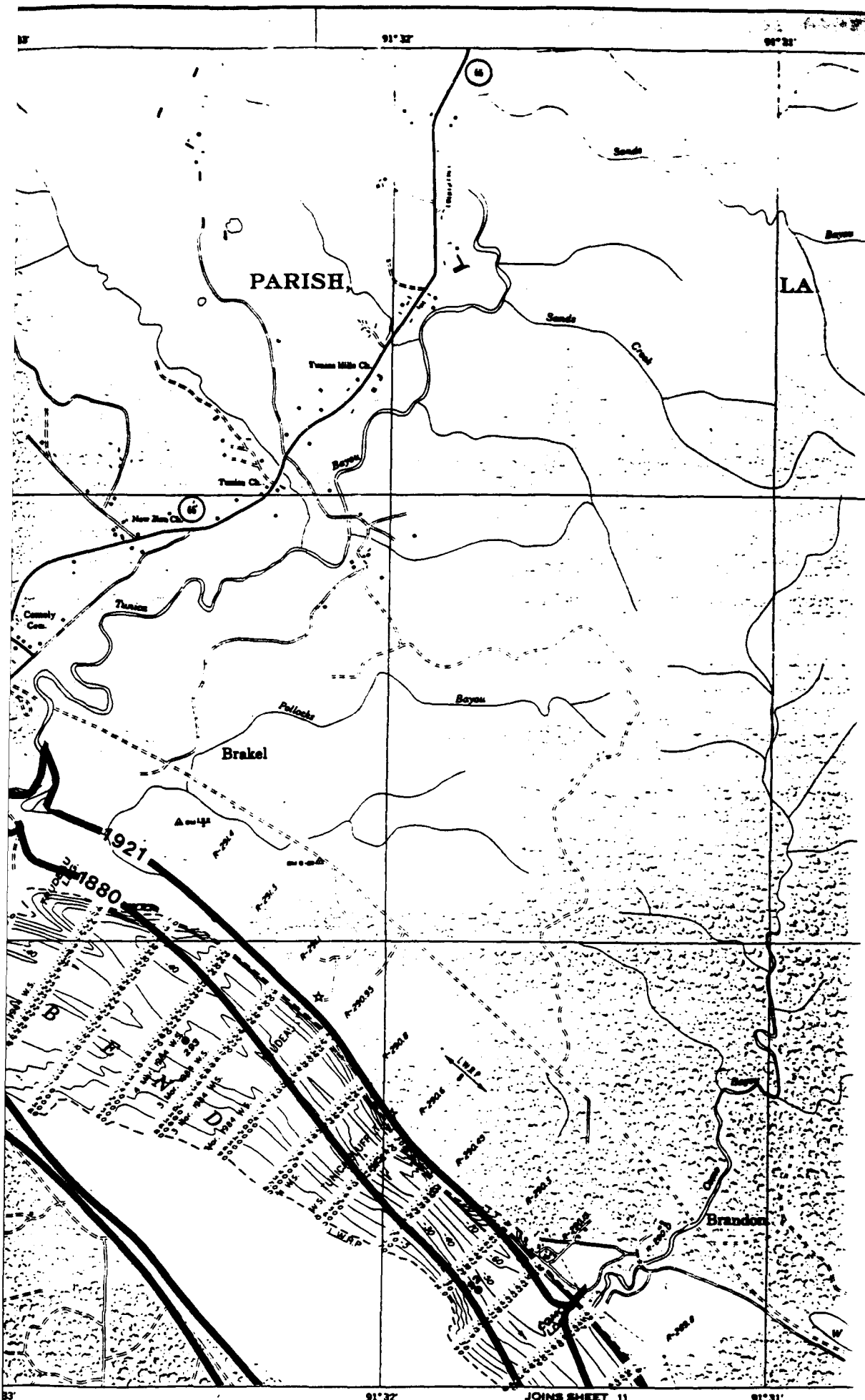


Figure 14: Channel changes of Mississippi River shown on Hydrographic Survey, Shown 9







JOINS SHEET 11

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By 1851, the west bank was protected almost continuously with levees from New Orleans to the Arkansas River and the east bank was protected as far north as Memphis (Elliott 1932). The levees have been raised repeatedly with successive floods. The levee grade line recommended by Humphreys and Abbot (1861) at Red River Landing was 50.3 ft, while that recommended by the Levee Commission in 1875 was 51.3 ft (Elliott 1932). The grade line finally implemented in 1928 is 60.5 ft high and is close to 5000 sq ft in cross-sectional area. The levee system in the proposed project area on the right bank closely follows the course of the river with the exception of Raccourci Bend, which is set back behind and adjacent to the oxbow lake several miles from the channel, and the Morganza Floodway, which allows overbank flow to spill into the Atchafalaya. On the left bank, the artificial levee extends from about mile 308 to mile 295 (USACE 1988), generally with a wider batture than on the right bank. Above and below this segment, it is confined by Pleistocene bluffs, which in some cases are up to 10 miles (16 km) from the present channel. The levee system has been quite effective during the twentieth century in preventing flooding and eliminating overbank deposition.

To prevent diversion of the Mississippi River into the Atchafalaya, it was proposed by the Corps of Engineers in 1954 that the Old River Control Project be built. The Old River Control Project which consisted of the Old River Control Structure, a lock and navigational system between the river systems, and a series of levees was completed in 1963. The Structure experienced considerable damage in the flood of 1973; consequently, in 1980 the Corps began to build an auxiliary control structure. This structure was completed in 1987.

Flow in the Atchafalaya River presently consists of inflow from the Red River, from controlled diversion of Mississippi River through the Old River outflow channel and the overbank control structure, and through the Morganza Floodway. The Old River outflow channel is used throughout the year, depending on the amount of flow in the Mississippi River. The Old River Control Structure restricts the flow entering the Atchafalaya to approximately 25 to 30 percent of the total flow in the Mississippi River upstream from it. Releases range from 0 cfs when the gates are closed to a maximum of 610,000 cfs during high discharges. No eastward flow has been observed in Old River since 1945. Releases generally exceed 20,000 cfs and average 157,000 cfs (Keown et al. 1977).

The Morganza Floodway is only used during overbank discharges. It extends from the Mississippi River near the town of Morganza to the southern boundary of Point Coupee Parish. It ranges from 4 to 10 miles in width and is enclosed by large earthen levees.

Part of the flow of the Atchafalaya River is diverted at the Wax Lake Outlet (mile 106, computed downstream from the Lower Old River). The Lower Atchafalaya River enters the Atchafalaya Bay at mile 135, while the Wax Lake Outlet enters the bay at mile 122. The channel length, and therefore the channel gradient, are therefore appreciably shorter than the 310 mile-long course of the Mississippi.

The Flora and Fauna of the Project Area

As noted above, the dynamics of the Mississippi River have had the most impact on the region around the project area. With the changes caused by such processes as bank erosion or aggradation and alluviation, vegetation in the project area often reflects these processes. Throughout the Carr Point and Hog Point portions of the project area, large trees such as sweet gum (*Liquidambar styraciflua*), live oak (*Quercus virginiana*), Sycamore (*Platanus occidentalis*), black willow (*Salix nigra*) and pecan (*Carya illinoensis*), among others, were abundant and well rooted. The soils in these segments of the project area, Robinsonville-Commerce (SCS 1982), were quite often sandy due to alluviation, but were underlain at various depths by more clay like soils. This allowed for the above mentioned trees to become well rooted and thrive in relatively well drained soils. Many of these trees, where bank erosion had caused them to fall from the top bank toward the river, caused considerable barriers to the survey.

Undergrowth in most of the Carr Point and Hog Point segments is not, for the most part, well developed. Species such as poison ivy (*Rhus toxicodendron*) and beggars ticks (*Bidens cernua*), however, are especially abundant in these areas. Where road cuts, drainage ditches or other activities had cleared away the canopy of the forest allowing more sunshine, briars were quite abundant and these also occasionally impeded the progress of the survey.

In both the Carr Point and Hog Point sections of the project area, the topography descends slightly away from the current top bank. In addition, the soils here are more clayey and less sandy reflecting how the smaller sediments are the last to be deposited in any episode of bank overflow and most likely to be farthest from a streams bank. Consequently, the vegetation reflected this change in soil characteristics. Species such as Cypress (*Taxodium distichum*), swamp-privet (*Forestiera acuminata*), and palmetto (*Sabal sp.*) are much more likely to occur in these portions of the survey corridor.

The Above Old River segment of the study area is somewhat different geomorphologically and the vegetation reflects that difference. While the same species are present for the most part, their distribution varied considerably with the rise and fall of the terrain. Types such as cypress and palmettos are very abundant, especially in the swales of this portion of the project area. The ridges, which are better drained, are for the most part covered by the same hardwood types and underbrush as described above.

The faunal assemblage of the project area is represented by a wide variety of mammals, reptiles, amphibians, and birds, in addition to insects. Common mammals are the opossum (*Didelphis virginiana*), beaver (*Castor canadensis*), armadillo (*Dasypus novemcinctus*), swamp rabbit (*Sylvilagus aquaticus*), raccoon (*Procyon lotor*), gray squirrel (*Sciurus carolinensis*), and the white tailed deer (*Odocoileus virginianus*). Deer are especially abundant in the project area and in addition to frequent sightings of the animals themselves, deer lies and droppings were often encountered during the field work. Also, area residents report increased sightings of coyotes (*Canis latrans*) around the region of the project area.

Reptiles in the area are numerous in variety and population with types such as water snakes (*Nerodia fasciata* var.) and garter snakes (*Thamnophis* spp.) very common. Water moccasins (*Agkistrodon piscivorus*) are also to be found, as are rattlesnakes (*Crotalus* spp.). Amphibians such as bullfrogs (*Rana catesbiana*), snapping turtles (*Chelydra serpentina*), and newts (*Notophthalmus viridescens louisianensis*) are also very common to the region of the project area.

Bird life in the project area is very prolific as is the case in much of Louisiana where natural habitats are undisturbed. Species such as the snowy egret (*Egretta thula*), blue heron (*Ardea herodias*), barn owl (*Tyto alba*), and red tail hawk (*Buteo jamaicensis*) are common to the area. A variety of ducks such as mallard (*Anas platyrhynchos*), pintail (*Anas acuta*), and teal (*Anas carolinensis* or *discors*) can also be found.

While the study area is currently uninhabited, that is not to say that modern human activities have not impacted it. The construction of a primary levee that parallels Louisiana Highways 15 and 418, as well as a secondary levee in portions of the Carr Point and Hog Point segments of the revetment, have definitely altered the natural environment. The first and most obvious change is that overbank deposits from flooding of the Mississippi River have been limited by the levees. Also, the construction of the levee created borrow pits, many of which were in the corridor to the survey. These lower areas provided a different sort of habitat for a variety of animal life and altered the drainage in parts of the area so that vegetation patterns were affected as well.

Other activities outside the boundaries of the study area, but close by and influencing the region, are the modern constructions of the Old River Control Structure and the Sidney A. Murray Hydroelectric Plant and the alterations of the course of the Mississippi River by Shreve's Cutoff and the Raccourci-Old River cutoff during the nineteenth century. The changes produced by most of these projects have already been described.

CHAPTER III

PREHISTORIC CULTURE HISTORY OF THE REGION

Paleo-Indian Period, Prior to 8000 B.C.

The initial human occupation of Louisiana probably occurred during the late Pleistocene, over 10,000 years ago. This occupation more than likely consisted of small bands of hunter-gatherers who were nomadic and possibly followed herds of now extinct mega-fauna such as the mammoth and the giant bison. The artifacts from this period are rare throughout North America and especially rare in the Lower Mississippi Valley. The most readily identifiable artifact consists of fluted lithic spear points such as Clovis, Folsom, San Patrice and others (Justice 1987).

While Paleo-Indian sites do occur in Louisiana, they are not without controversy and none are located near the current project area (Neuman 1984). The so called "Natchez Man", however, a portion of human pelvis reportedly found in the mid-nineteenth century in the same context with the skeleton of extinct Pleistocene megafauna in the loess bluffs near Natchez, Mississippi, provides an intriguing indication of possible Paleo-Indian occupation in or near the current project area. This find, which has gone in and out of favor with the scientific community, was dated by fluorine content in 1895 to be the same age as the skeleton of extinct megafauna (Quimby 1956). If this first and last report of human remains in association with Pleistocene megafauna is true, the similarity of the terrain in the Tunica Hills to the loessal bluffs of Natchez provide for at least the possibility of Paleo-Indian occupation in the study area.

Archaic Period - 8000 B.C. to 1500 B.C.

The change of climate marking the end of the Pleistocene era led to an eventual change in the flora and fauna of North America and caused an apparent change in the lifeways of the inhabitants of the continent. With the extinction of large megafauna, smaller game and seed and nut gathering became the chief subsistence of prehistoric Indians during the so-called Archaic period. Sites of *in situ* remains from this period are also rare in Louisiana (Haag 1961). The Archaic sites present in Louisiana and the Lower Mississippi River Valley are recognized to have a greater variety of lithic artifacts, as well as bone tools, which may reflect increasing adaptation to environmental changes brought on by the end of the Pleistocene. Although pottery is not associated with the Archaic period, steatite vessels and basketry probably served as containers.

Also, the appearance of the atlatl or dart thrower as a technology for launching projectiles is widely recognized as a diagnostic artifact of the Archaic period (Neuman 1984). In addition to the dart points themselves, clay, stone and even shell objects known as boatstones or

bannerstones are thought to be possible weights added to the atlatl to increase the force of the dart launched by the throwing stick (Neuman 1984:79).

While most Archaic sites in Louisiana are found in upland areas, away from alluvial valleys, this may be a product of alluvial deposition burying sites from this period rather than an indication that such areas were avoided during the Archaic (Haag 1961). A good example of this probability is 16CO21, a site in the general region of the current project area. Two lithic projectile points, reportedly classified as Hale and Kent types, of gray mottled and yellow tan chert respectively, were found on the top bankline of an excavated outflow channel associated with the Old River Control Structure (Louisiana Division of Archaeology site files). Such a site in the alluvial plain of the Mississippi River indicates a presence in the study area during the Archaic; but it also illustrates the difficulty of finding such sites because they are probably covered by several feet of alluvium or have been removed from an *in situ* deposit by numerous events of erosion and redeposition that could have occurred in the thousands of years since the Archaic period.

Poverty Point Period - 1500 B.C. to 800 B.C.

Out of the Archaic tradition, several new cultural developments occurred in several regions of North America. Domesticated cultigens, pottery making, and mound building are recognized as characteristics that suggest increased populations, social complexity beyond bands of hunter and gatherers, and the introductions of new technologies. In Louisiana and the Lower Mississippi Valley, the Poverty Point period (1500 to 800 B.C.) saw one of the most dramatic such transitions from the Archaic. The Poverty Point site is unique for its large mounds, concentric patterned earthen ridges, huge amount of baked clay objects, and apparent extensive trade network (Webb 1982; Neuman 1984). While dart points and boatstones are associated with Poverty Point period sites, suggesting a continuation of Archaic subsistence techniques, there is increasing evidence that some horticulture may have taken place at the Poverty Point site.

No verifiable sites dating from the Poverty Point period have been found in the current project area. However, Dr. Fred B. Kniffen's allusion to "74 clay squeezes" at 16WF3, the Angola Gate Mound, may be an indication of a Poverty Point period occupation in the area. Unfortunately, the mound and associated site have now been completely destroyed by construction associated with Angola State Prison (Kniffen personal communication).

Tchefuncte Culture - 500 B.C. to A.D. 200

Following the decline of the Poverty Point period, the archeological record for Louisiana and the Lower Mississippi Valley is somewhat confused. In south Louisiana, the succeeding culture is the Tchefuncte, which is generally regarded as a less complex period than the preceding Poverty Point period. The Tchefuncte culture did, however, exhibit one generally recognized technological achievement over the Poverty Point culture: wide spread production

and use of pottery (Ford and Quimby 1945). Originally associated with the coastal regions of Louisiana, it has been ascertained that this culture, which essentially added ceramics to techniques associated with the preceding Poverty Point period, extended northward beyond coastal regions (Neuman 1984; Toth 1988:19-21). Usually recognized by their ceramics, Tchefuncte sites are relatively few in number, and composed of small hunting camps that suggest a partially nomadic existence. Human remains and seed evidence, however, suggest that this period also had the rudiments of agriculture, or perhaps more aptly, horticulture (Neuman 1984; Weinstein and Rivet 1978). No Tchefuncte period sites are known to exist in the environs of the current project area.

Marksville Culture - 100 B.C. to A.D. 400

The Marksville culture, with its complex type site located on the eastern edge of the Avoyelles Prairie about 20 miles west of the project area, is interpreted as a southern manifestation of the Hopewell culture. Characteristic pottery types, conical burial mounds, and elaborate earthworks all point to some sort of connection with the Hopewell in the Ohio River Valley. While WPA-sponsored excavations of the Marksville site have unfortunately gone unreported, an admirable synthesis of data for this period has been performed by Alan Toth (1974). He and previous investigators have long noted that the characteristic conical mounds of the Marksville period were once in far greater number than they are today and that the sample available for archeological study is only a small fraction of what was once available. Additionally, while Toth laments the focus of study of the Marksville period upon the mounds and the burial practices of this era, he feels that additional data on subsistence and settlement patterns would increase our understanding of the Marksville period (Toth 1988).

Monk's Mound, investigated by Toth, among others, is approximately 3/4 of a mile south of Raccourci-Old River and located on the backside of the natural levee that once was the main channel of the Mississippi River. The site is in a well preserved state and likely to remain so given the current preservation minded landowner. This conical mound and diagnostic ceramics associated with the mound point to a definite Marksville period occupation in the study area. Furthermore, as Toth notes in his dissertation: "The little evidence there is from Monks points to a very exciting site with tremendous potential for early Marksville research. The mound must be preserved, as it may constitute the only surviving example of Smithfield phase mortuary activity (Toth 1988:206)."

Baytown Period - A.D. 300 to A.D. 700

Following the Marksville period, a loosely labelled period termed Troyville, named after the type-site at Jonesville, Louisiana, is generally regarded as a transition period leading to the cultural florescence of the later Coles Creek period in the Lower Mississippi Valley. Although the diagnostic traits of this period are still debated and somewhat less than definite, its type site is the now largely destroyed Troyville site in Jonesville, Louisiana.

The site originally had at least nine mounds and an earthen embankment that restricted access to most of the mounds within an area made further inaccessible by the natural boundaries of the Little and Black Rivers. James A. Ford (1951) noted differences in the ceramics at the Troyville site from those associated with the Marksville period and those of the later Coles Creek period. Later analysts, however, have proposed that the Troyville period, expanded to include Baytown ceramics from the Yazoo and St. Francis River Basins, should be considered a somewhat less than distinctive period that has many continuities stretching into the Coles Creek period (Gibson 1982). Platform mound building, as opposed to the typically conical mounds of Marksville was apparently first practiced in the Troyville period. A site exposed by the construction of the outflow channel of the Sidney A. Murray Hydroelectric Plant (16CO29), appears to date, at least partially, from this period.

Coles Creek Period - A.D. 700 to A.D. 1200

The Coles Creek period is one of the most widespread and clearly defined archeological horizons in Louisiana. It is recognized by several diagnostic pottery types such as French Fork Incised and Coles Creek Incised, among others, and by the introduction of the pyramidal platform mound. The type site of the Coles Creek period, the Greenhouse site (16AV2), is on the floodplain just east of the Avoyelles Prairie, approximately 18 miles west of the current project area. This site, partially excavated by WPA-LSU archeological work in 1939 was reported by James A. Ford in 1951.

In addition to the Greenhouse site, other mound sites possibly associated with the Coles Creek period dot the floodplain landscape for the twenty miles span between the Avoyelles Prairie and the Mississippi River. Before modern levee construction, this portion of Louisiana was frequently inundated by overflow from the Red River (Ford 1951). However, the existence of sites such as the Greenhouse site (16AV2); the Lake St. Agnes site (16AV26); the Lower Long Lake site (16AV10); and the School Bus site (16AV38); among others, would seem to indicate that this same floodplain may have once been less susceptible to flooding at some point in prehistoric times and therefore more habitable. Indeed, it is a point of curiosity that the Greenhouse Site, originally consisting of seven mounds, was built at the very foot of the Avoyelles Prairie escarpment, instead of upon the escarpment itself (Ford 1951; Jones and Shuman 1989).

In addition to mound sites on the west bank of the Mississippi in the general region of the project area, Brain's excavations at the Trudeau Landing site (16WF25), revealed a Coles Creek occupation. The second prehistoric occupation at the site, postdating an apparently short lived Baytown culture occupation, was a manifestation of the Coles Creek culture. Distribution of surface and excavated artifacts suggested a small village that was located at the base of the loessal bluff at the site and extended out toward the river (Brain 1982:112-113).

Plaquemine-Caddo Cultures - A.D. 1200 to A.D. 1550

Concomitantly and following the Coles Creek period, several cultural developments occurred in various portions of Louisiana. The Caddo culture, which is often associated with northwestern Louisiana and the Red River, enjoyed something of a florescence and was influenced by a number of surrounding cultures, perhaps even as far away as Mesoamerica (Neuman 1984:218). Sometime after A.D. 1000, the Plaquemine phenomenon, originally defined by the Medora site (16WBR1), on the Mississippi River continued the mound building tradition, showed definite evidence of maize agriculture, and exhibited specific pottery types such as Plaquemine Brushed, L'Eau Noir Incised, and Harrison Bayou Incised (Quimby 1951; Phillips 1970).

While no Plaquemine or Caddo sites are known in the immediate region of the current project area, sites such as the Lake St. Agnes Mound (16AV26)(Toth 1979) and the Nick Farm site (16AV22) a Plaquemine period mound site on the Avoyelles Prairie (Jones and Shuman 1989) attest to possible occupation of the study area during this period. Also, given evidence that the pottery types such as Maddox Engraved have been found at sites such as the Baptiste site (16AV25) on the Avoyelles Prairie, as well as at the Prairie Lake Mound (16CO28), suggests a Caddoan presence, or at least influence, during the late prehistory of the study area (Phillips 1970:107-108; Moore 1911).

The proto-historic period in the Lower Mississippi Valley indicated a fairly extensive aboriginal occupation, although probably less intense than during the Coles Creek period. Mound building, while still extant among some groups, was generally on the decline. Maize agriculture, along with other cultigens, provided a subsistence base that was augmented by continued hunting and gathering. Some groups were organized into large and populous chiefdoms, with a fair degree of sedentism, while other groups were smaller and more simply organized and thus more likely to be nomadic or semi-nomadic.

CHAPTER IV

THE HISTORIC PERIOD IN THE PROJECT AREA

Contact and Colonial Period, 1542-1803

Already exploiting the treasures of the Aztecs in Mexico and the Incas in Peru, the Spanish eagerly accepted the stories of additional treasures to be found in the New World. This interest was reinforced when Cabeza de Vaca recounted his years travel (1528-36), which included long periods among the Indians of the Southwest.

Pondering de Vaca's accounts of the fabled Seven Cities of Cibola, Hernando de Soto, recently appointed Governor of Cuba and military commander of Florida, reasoned that the treasures of Cibola probably existed within the territory under his authority. Having established his regime in Cuba, de Soto led about 600 men ashore at Tampa Bay Florida in 1539 on in search of the fabled Cibola. This expedition spent the next three years travelling through much of present day Southeastern United States until the remnants of the group arrived in Mexico in 1543.

Thus, it was members of de Soto's expedition who were the first Europeans to see the portions of the Mississippi River within the current project area. According to Swanton (1985:56), the Spaniards, after reaching the province of Anilco, received a visit from the chief of the Guachoya tribe, who were the principal enemies of Anilco. Learning that the Guachoya village was on the Mississippi, de Soto set out in that direction. The chief of the Guachoya, after initially fearing the Spanish, eventually became their ally in an attack on Anilco. Swanton places the Anilco site at Jonesville, although that and most other sites connected with de Soto's *entrada* are debated. Guachoya, the site of de Soto's death, Swanton places near modern Ferriday, Louisiana. Wherever Anilco and Guachoya were located, the remnant of de Soto's invading force wandered west as far as Texas before returning to Guachoya, building boats and travelling down the Mississippi River past the mouth of the Red River, and eventually to other Spaniards in Mexico (Swanton 1985).

The de Soto expedition ended Spanish activity in the vicinity of the mouth of the Red River for more than 200 years. Renewed Spanish interest in the Lower Mississippi Valley was a response to the French colonization of Louisiana. French activity in this territory was an extension of their colonial venture in the St. Lawrence River Valley. During the 1660s officials in New France developed a plan to ensure that they dominated the fur trade of the North American heartland. They envisioned a chain of forts and trading posts on a broad arc from Quebec on the St. Lawrence, through the Great Lakes and Mississippi Valley, and terminating at a fortified trading post to be built near the mouth of the Mississippi River.

Chosen to investigate the feasibility of this plan was Rene Robert Cavelier, Sieur de La Salle. The La Salle expedition departed from the vicinity of present day Chicago in late December 1681. Four months later, having descended the Mississippi River, La Salle's party neared the location of present day Natchez, Mississippi. Here the expedition encountered the Taensas and Natchez Indians and on March 31, opposite the mouth of the Red River, passed the villages of the Houma Indians. One week later, the company reached the point where the river divided into three broad channels that flowed into the gulf. Having spent several days exploring the marshy coast surrounding the river's mouth, La Salle assembled his party on a point of dry land near the area of the Head of Passes and claimed the entire drainage basin of the Mississippi River for France, naming it Louisiana after his sovereign, Louis XIV (Parkman 1910:217-227; Woods 1980:23).

Two years later La Salle attempted to plant a colony near the mouth of the Mississippi. Misfortune plagued this expedition, and the colonization effort met a demise shrouded in mystery on the Texas coast. The French did not lose interest in this project, but a war with the English delayed renewed efforts at colonization.

After the war ended in 1697, the French selected Pierre Le Moyne, Sieur d' Iberville, to command a new colonizing expedition. His fleet arrived on the Gulf Coast in late January 1699 and in mid-February he established a camp at Biloxi Bay. In early March, an exploration party headed by Iberville and brother, Jean-Baptiste Le Moyne, Sieur de Bienville, rediscovered the mouth of the Mississippi River and ascended the river as far as the Houma Indian Village near the mouth of the Red River on what is now Angola Prison Farm. This site was later occupied by the Tunicas. Iberville spent the night of March 20, 1699 at this village and described it and its inhabitants in remarkable detail. An example of this detail is Iberville's description of the Houma village plan:

This village is located on a hill, on which there are 140 huts. There are possibly 350 men at most and many children. All the huts are on the slope of the hill, in two rows in certain places and in a circle. In the middle, there is a village square 200 yards wide kept in good order. The corn fields are in little valleys and on hills in the vicinity. This whole region is chiefly hills of fairly good black soil (Iberville 1981:69).

While on this ascent, Iberville's party traversed a short cut to avoid traveling the course of a nearly 20 mile long curve in the river. The site at which the party reentered the river's main channel was called *La Pointe Coupee* by Iberville.

Iberville was searching for a fork in the Mississippi that had been mentioned earlier by La Salle and Tonti, La Salle's lieutenant. This "fork" may have been the confluence of the Red River with the Mississippi or the then periodic flow of the Atchafalaya River out of the Mississippi. If so, Iberville was very close to his goal before he returned downstream still unsure if he was on the same river as La Salle. Iberville describes how a Taensa tribesman made a map at his request of the Mississippi River to the gulf. A variety of

Indian settlements were associated with the Tassenocogoula River (one name for the Red River) The settlements had names linguistically affiliated with Caddo tribes (Iberville 1981:71). The search for this fork eventually led to Iberville's journey back down the Mississippi River and the exploration of Bayou Manchac, then another periodic distributary of the Mississippi River (Iberville 1981). Figure 14 is a detail of Guillaume De L'isle's map of 1702 showing the project area which no doubt included information provided by Iberville on the Mississippi River and features and inhabitants along its banks.

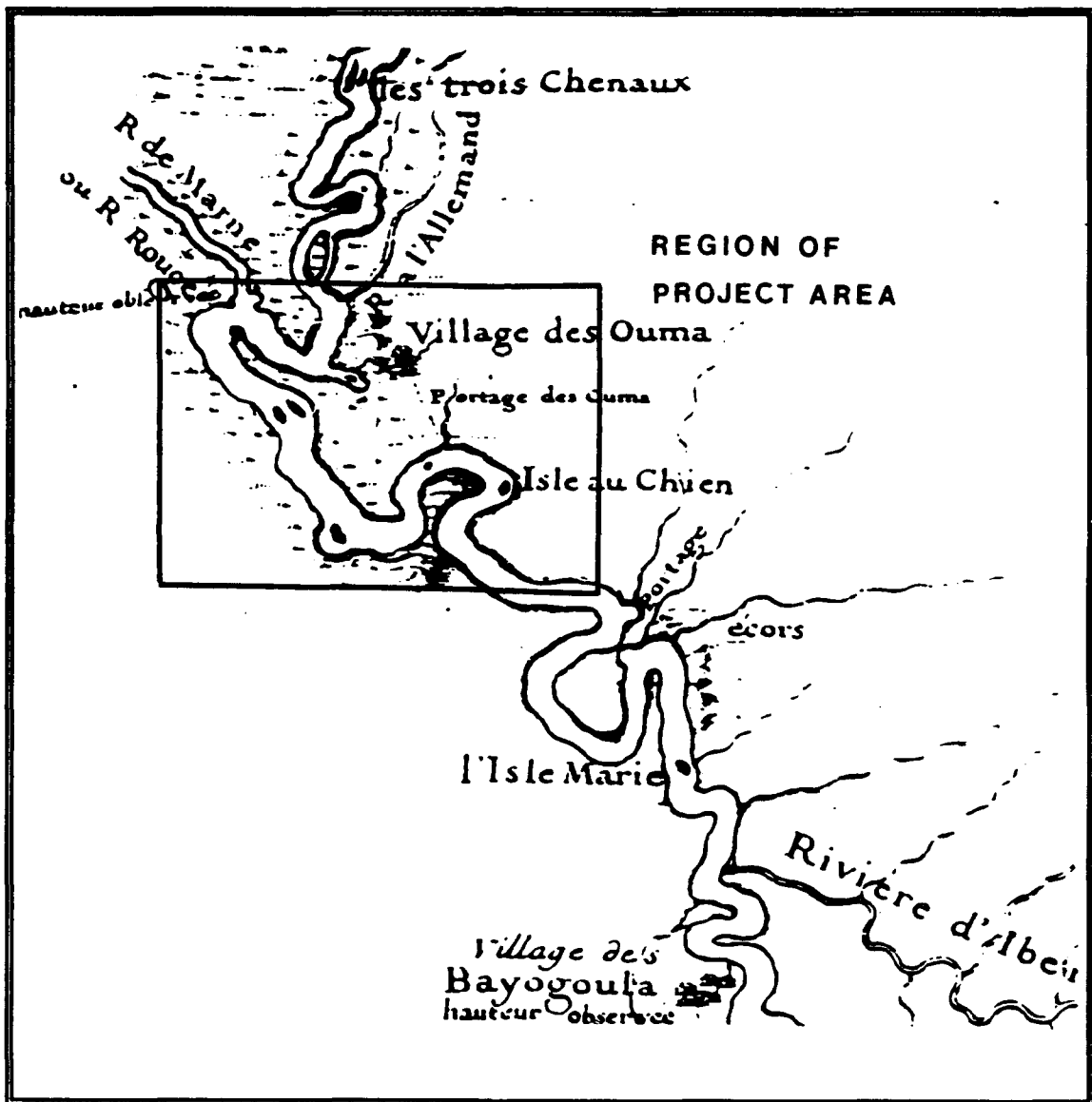


Figure 14: Detail of Guillaume De L'Isle's 1702 map of Mississippi River. Source: Guillaume De L'Isle.

Upon returning from this reconnaissance of the Mississippi River, Iberville selected a site on the eastern shore of Biloxi Bay for his colonial settlement. Here his party constructed Fort Maurepas. This post served as the center of the Louisiana venture for three years, but in 1702 the necessity of finding a location more conducive to agriculture prompted Iberville to move the settlement to a site just north of present day Mobile, Alabama.

While the Louisiana colony expanded slowly from its locus on the gulf coast, French-Canadian fur trappers, *coureurs de bois*, were active in the Pointe Coupee region soon after 1700. There is reason to believe that a few of these individuals settled, at least temporarily, in Pointe Coupee as early as 1708. Pointe Coupee was also a subject of interest expressed by the Company of the West, a proprietary venture that had taken over the development and governance of the colony from the French crown. The company sought to stimulate population growth through the provision of large land grants, called concessions, to wealthy Frenchmen who would underwrite their development. Several of these concessions were awarded in the Pointe Coupee region, but they were not developed. Regardless, a colonial census conducted in 1726 revealed that Pointe Coupee had a population of 20 (Woods 1980).

Although French-Indian relations were not always amiable, as evidenced by the war with the Natchez in 1729-30, some tribes did become closely allied with the French. The Tunica tribe was perhaps the most famous of these aboriginal allies to the French, although their leaders seemed to be the consummate survivors who played the various European governors in the region against one another (Kniffen et al. 1987:64).

Archeological sites near the current study area such as 16WF25, 16WF2, and 16WF21, are sites that have been excavated and shown extensive collections of European trade items. Significantly, most of these items have been found in association with burials which may indicate that such items were in such surplus that their interment with the dead did not detract from the quality of life for the living. Furthermore, all these sites are located in a region that the French dubbed the Portage of the Cross where a voyage on the Mississippi could be shortened when it was used. This portage and the confluence of the Red River gave the Tunica a strategic position in the early days of French colonial Louisiana, especially with French settlement increasing a few miles downstream in the Pointe Coupee area. The Tunica apparently used their strategic location to become successful traders in horses, an animal the early European colonialists were not likely to obtain from the mother country. All of this: strategic location, proximity to European customers, and ties to other Indian groups with access to horses, produced the relative material wealth that is reflected in the Tunica Treasure (Brain 1988:16-18). With the cession of Louisiana to the Spanish in 1763, the Tunicas' position apparently became more tenuous until they eventually migrated to their current residence in Marksville, Louisiana in the late eighteenth century (Kniffen et al. 1987).

Despite the importance of the commerce between the Tunica and the French, developments and events upstream overshadowed the course of French involvement in the

Lower Mississippi Valley. As the Louisiana colony entered its proprietary period, colonial officials became increasingly alarmed by the activity of English traders in the area. To stifle this threat to French hegemony along the Mississippi, the officials of Antoine Crozat's concession sought to protect French trading interests by constructing a military post on the strategic bluffs at Natchez. This post, built in 1716, was known as Fort Rosalie. By 1720, over 100 whites had taken up residence in the Natchez country (Woods 1980:55-63).

Throughout the 1720s Fort Rosalie and the neighboring concessions remained very much frontier outposts. Racial tensions and commercial disputes frequently exacerbated what was at best an uneasy relationship between French settlers and their Indian neighbors. On November 28, 1729, the peace collapsed as the Indians, reacting to the latest in a series of rebuffs and insults from the French commander at Ft. Rosalie, Captain Chepart, attacked their unsuspecting white neighbors. Before the day ended, 237 white residents of the fort and surrounding area had been killed (Woods 1980:95-96).

The Natchez Massacre sent a wave of panic throughout the colony. French officials understood the necessity of punishing the Natchez, but also realized that the task would take several years. In the process, the Natchez were driven from their ancestral home and pursued over much of northern Louisiana. Those captured were sold into slavery and shipped away and those avoiding capture eventually took refuge among the Choctaw (Woods 1980:101-109).

The Natchez Massacre also produced several significant changes in the Louisiana colony. Having despaired of making Louisiana into a revenue generating project, the concession directors petitioned the crown and secured permission to return the colony to the King. The outcome of this and the eventual routing of the Natchez Indians stimulated development in the Pointe Coupee region. The King's organization, the Company of the Indies, subdivided Louisiana into nine districts, one of which was Natchez. The area between Natchez and Pointe Coupee was within the Natchez district and the massacre had prompted many residents who had been living east of the Mississippi to relocate in the vicinity of Pointe Coupee where they thought they would be more secure (Moore 1976:27; Riffel 1983:4).

The settlement at Pointe Coupee was by no means large. Indeed, a French census in 1733 revealed that it had only 79 white and 52 black residents (Riffel 1983:4). But concern over the prospect of continued Indian depredations along this frontier prompted French authorities to strengthen the region's defenses. Although it cannot be definitely established, it appears that Governor Etienne de Perier ordered the construction of a small stockade amid the Pointe Coupee settlers. Apparently this defensive outpost was intermittently garrisoned until the mid 1740s. Afterwards the French maintained a military presence at a post located between the upper end of False River and the right bank of the Mississippi River opposite Bayou Sara (Casey 1983:161-162).

The presence of this post reflects the fact that the Pointe Coupee settlements were continuing to expand, albeit slowly. Indeed, a census taken in 1745 revealed a population composed of 260 whites; 391 black slaves; 23 Indians, of whom 20 were slaves; and 15 mulattos (Barron 1978:34). In large measure, the slowness of development reflected the fact that Louisiana was a backwater in the French colonial empire. Understandably, the French court directed the bulk of its attention to colonial affairs toward those possessions which produced a profit (i.e. Canada and the West Indian sugar islands). Moreover, during much of the French colonial period, France was either fighting or struggling to recover from intercolonial wars with arch rival Great Britain. These concerns justifiably diverted official attention away from a possession that remained a drain on the French treasury.

For much of the French colonial period, therefore, events charted their own course in Louisiana with minimal direction from Europe. This situation would change abruptly as the fourth and final of the intercolonial conflicts, the French and Indian War or the Seven Years War, recast the role of Louisiana on the stage of North American and international geopolitics. The most striking of these changes was that Louisiana, as a result of the French defeat, became a Spanish possession. By 1762, it was clear that the British would prevail and that France would be stripped of its North American colonies in the peace negotiations. The French also apparently felt some remorse because the Spanish had lost Havana to the British as a result of entering the war as an ally of France. Consequently, the French offered to cede Louisiana to the Spanish as part of a preliminary negotiation to end the war.

Eager to use Louisiana as a buffer between the English and their more lucrative colonies in the West, the Spanish obtained Louisiana from the French on November 3, 1762. The Mississippi River north of Bayou Manchac became an international boundary. In recognition of this fact, the Spanish occupied the existing fort at Point Coupee, renaming it Punta Cortada, and used it throughout the period of their authority as a lookout post from which to monitor the activities of the British in West Florida (Casey 1983:162).

As part of British control over West Florida, Captain Philip Pittman made a reconnaissance of portions of the area that were newly acquired by the British Crown in 1765-68. Pittman noted that the French settlement at Pointe Coupee extended for about 20 miles on the west bank of the Mississippi and that some settlers were on the back side of False River, the former channel of the river. He also remarked upon the Spanish fort at Pointe Coupee, saying it was a stockade built with four bastions and that it contained adequate shelter for the military personnel stationed there (Figure 15). He estimated the garrison for the fort to be no more than twelve soldiers whose purpose was really to help maintain public order. The produce of the plantations, tobacco, indigo, and poultry were shipped downriver to New Orleans, as was lumber which was harvested from both sides of the Mississippi (Pittman 1973:33-34).

Pittman also noted the degenerate state of the Tunica whom he described as "formerly a numerous nation of Indians; but their constant intercourse with the French and immoderate use of spirituous liquors has reduced them to about thirty warriors (Pittman 1973:35)."

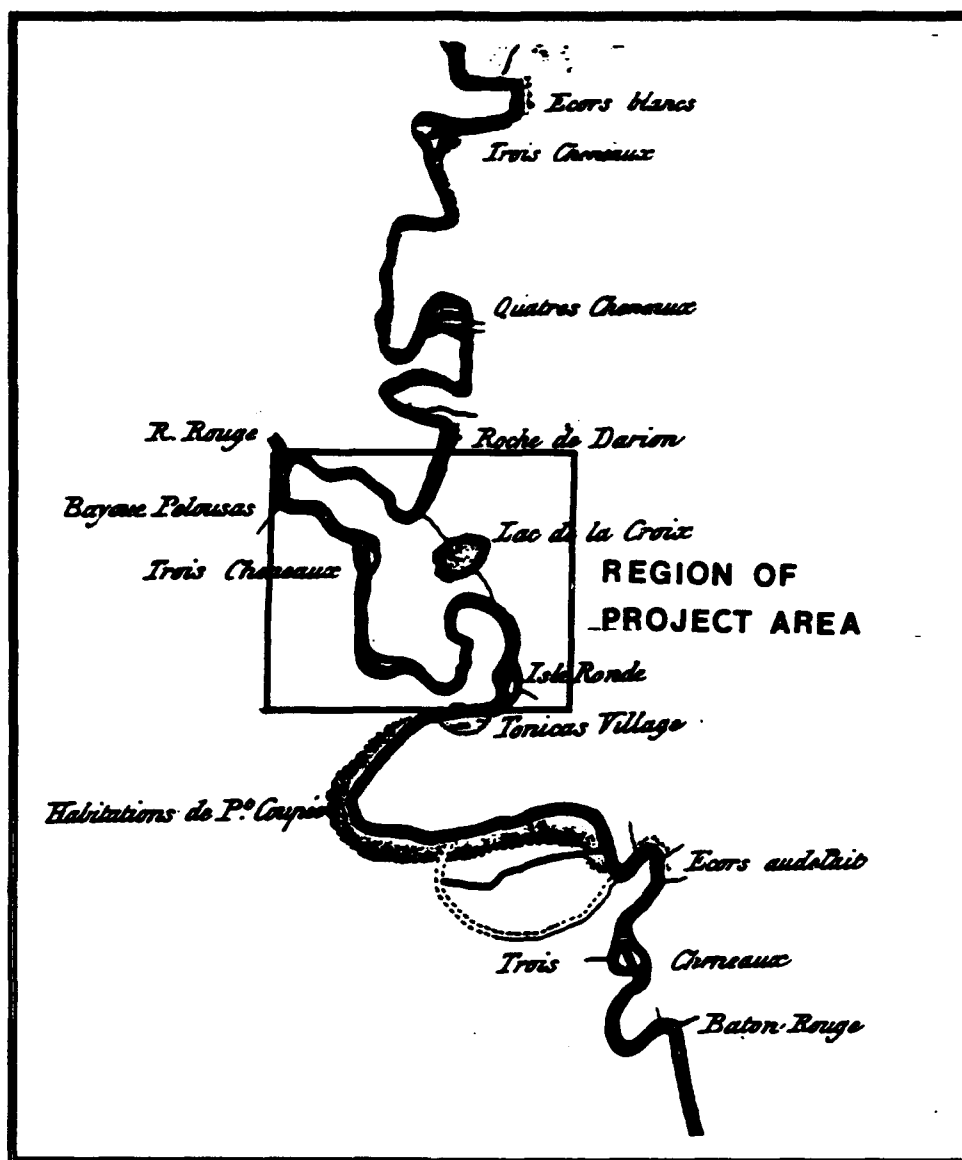


Figure 15: Detail of portion of chart of Mississippi River done by Phillip Pittman in 1770. Source: Pittman 1973.

Pittman also described the Pelousas River, then a name for the Atchafalaya, although he has it as a river flowing into the Mississippi and fed by a lake "forty leagues" to the southwest (Pittman 1973:36).

Another traveler of note who passed through this region in the late 18th century was naturalist William Bartram. Traveling in various portions of the Southeast, Bartram made many observations of the European settlements, the native inhabitants, as well as the natural environment that have since proven to be historically valuable. By the summer of 1777,

Bartram was in present day Louisiana where he traveled via the Amite River and Bayou Manchac to the Mississippi River. From there he proceeded upriver to the region of Pointe Coupee. He noted the high bluffs of the Tunica Hills and their vegetation and fossil deposits. Bartram traveled on to the Pointe Coupee settlement then under Spanish control. There he noted that:

The French here are able, ingenious and industrious planters: they live easy and plentifully, and are far more regular and commendable in the enjoyment of their earnings than their neighbors the English: their dress of their own manufacture, well wrought and neatly made up, yet not extravagant or foppish; manners and conversation easy, moral and entertaining (Bartram 1940:346).

Often, however, these positive characteristics of the French described by Bartram were tested by the nature of the Spanish domination of Louisiana. In February 1768, a party of 149 Acadian refugees arrived in New Orleans. These individuals had, upon their displacement during the 1750s from Nova Scotia, settled in Maryland. Encountering less than a hospitable reception there, they had recently secured permission to immigrate to Spanish Louisiana. They planned to settle with kinsmen from Nova Scotia who earlier in the so called Grand Derangement had settled along the Mississippi between New Orleans and Bayou Manchac or in Pointe Coupee. The Spanish governor, Ulloa, sought to settle these immigrants at a new lookout post opposite British Fort Panmure, the site of the former Fort Rosalie. This post was known as San Luis de Natchez (Moore 1976; Brasseaux 1987).

Ulloa's plan to locate this batch of Acadian immigrants opposite Fort Panmure encountered considerable opposition among the French population. Not to be deterred, Ulloa insisted that the recent immigrants cooperate and even threatened the Acadians with deportation. In no position to dismiss the governor's wishes, the Maryland Acadians put aside their desires to settle among kinsmen and moved to present day Concordia Parish. Unfortunately, this settlement did not prosper at a location chosen for its military value rather than its fitness for human habitation. This forced location at San Luis de Natchez and Ulloa's steadfast refusal to allow these Acadians to relocate sparked the colony's Acadian population to support the revolt that drove the governor from the colony in late October 1768 (Moore 1976; Brasseaux 1987).

After Alexander O'Reilly restored Spanish authority in Louisiana, the Pointe Coupee settlement assumed a pattern that would remain fundamentally unchanged until well into the twentieth century. It was an agrarian society, increasingly dominated by large plantations, initially producing tobacco and indigo, but changing to the more profitable cotton and sugar cane crops by the early nineteenth century. Indeed, Pointe Coupee lay withering the transition zone between plantation and small farm agriculture because it is just within the northern most limit of sugar cane production.

The cultivation of all these crops is labor intensive. To supply the labor that production on a plantation required, the sugar cane and cotton growers increasingly turned to chattel slavery. This trend was very apparent just before Pointe Coupee became part of the United States with the Louisiana Purchase. In 1802, James Pitot observed that 700-800 whites resided in Pointe Coupee and that the more affluent of them owned approximately 2000 slaves (Pitot 1979:123).

While in the eyes of the large plantation owners commercial agriculture required the maintenance of this large black population, its existence also produced a certain amount of fear among the white residents of the region. Clearly these fears were not without justification, as scattered and often isolated white minorities struggled to control a black majority. The tensions that this constant vigilance produced were periodically heightened by rumors of impending insurrection. The most famous of these waves of alarm occurred in April 1795. Spanish militia officers learned that several slaves were plotting an insurrection to gain their freedom. Reacting with haste, the militia arrested the alleged conspirators before they could put their plan into effect. Having been interrogated by a Spanish tribunal, the alleged ringleaders were sentenced to be hanged, and executed. Their heads were put on public display throughout the region between Pointe Coupee and New Orleans to deliver a message that slave insurrection would be dealt with firmly and swiftly (Holmes 1970).

The pattern of economic development in Pointe Coupee Parish was firmly in place by 1800 with the emergence of a plantation economy based on slave labor. The transitions from French to Spanish, back to French, and finally to American control changed little except the systems of government. During the antebellum period the social and economic patterns already established simply matured and became more accepted.

Louisiana Purchase and Statehood

Acquired as part of the Louisiana Purchase, the region around the mouth of the Red River was little known to Thomas Jefferson and his countrymen who had purchased it. In order to counter this ignorance, Jefferson ordered what came to be known as the Freeman and Custis Expedition up the Red River in 1806. This expedition was part of the same program of exploration that generated the more famous Lewis and Clark expedition that traveled up the Missouri River.

The expedition left Fort Adams, now in Mississippi, on April 28, 1806 in two barges and a "periogue." They were unable to take astronomical observations to locate the mouth of the Red River because of weather conditions, but they reported other data which gave it the location of 91° 47' 45" west and 31° 1' 15" north. When the Freeman and Custis expedition ascended the Red, the mouth of the stream was reported to be 1/2 mile wide and 84 ft deep. They further noted the elevation of the banks 25 feet above the river, and the varieties of vegetation they encountered (Flores 1984:101-104). This expedition, which

intended to find the headwaters of the Red River, was turned back by Spanish authorities in present day Bowie County, Texas in August of 1806 (Flores 1984).

With the advent of American control of Louisiana, it seems that the population grew quickly and significantly, with the population almost quadrupling between 1810 and 1860 (Calhoun 1988). The development of the above described agricultural system base on the plantation was no doubt responsible for that increase.

Another traveler in Louisiana during its early days of statehood was surveyor and geographer William Darby. Between 1805 and 1815 Darby, a largely self taught man of letters, conducted topographical surveys, and took notes on the terrain and inhabitants of Louisiana and adjacent areas. His *A Geographical Description of the State of Louisiana* (1816) and *The Emigrants's Guide to the Western and Southwestern States and Territories* (1818) established him as an authority on the newly acquired area of the United States that was largely unknown to the more populated regions on the east coast. A map accompanying the 1816 work was one of the first consistent scientific maps of Louisiana ever done (Kennedy 1981). Figure 16 is a detail of that map highlighting the region near the study area.

Near the project area, the establishment of St. Stephens Episcopal Church reflected the growth of Anglo gentry in the Upper Pointe Coupee region before the Civil War. This church, founded in 1848, and dedicated by Bishop Leonidas Polk from New Orleans who was to later become a Confederate general, was the first Episcopal church west of the Mississippi River. The cemetery at the church reflects the long term association of families in the area for whom entire communities are named. Names such as Innis, Keller, Williams, and Lettsworth are to be found in large, often enclosed plots. The church continues to have an active congregation and the building and cemetery are on the National Register of Historic Places (Riffel 1983:68-69).

As with much of the rest of the South, Pointe Coupee Parish and adjacent areas experienced death and destruction as a result of the Civil War. Port Hudson, until 1862 a small river village, was established as a fortified position, along with Vicksburg, Mississippi to guard the confluence of the Red and Mississippi rivers. The Red River was an important east-west transportation route for supplies and men from the western portions of the Confederacy to the more beleaguered eastern section. Maintaining this section of the River in Confederate hands was deemed crucial to survival of the South (Hewitt 1987:2-5).

The war came to the Pointe Coupee region in earnest in February 1863 as Union troops entered the parish looking for a way to move an army upriver past the Confederate stronghold at Port Hudson. The Confederate commander at Port Hudson dispatched troops to engage the Union forces and subsequently drove them from the area. Federal activity continued along the river near Port Hudson and included several small raids in the vicinity of the Hermitage community in Pointe Coupee. The Confederate commander at Port Hudson was unable to prevent these raids, but troops under his command opened a crevasse in the

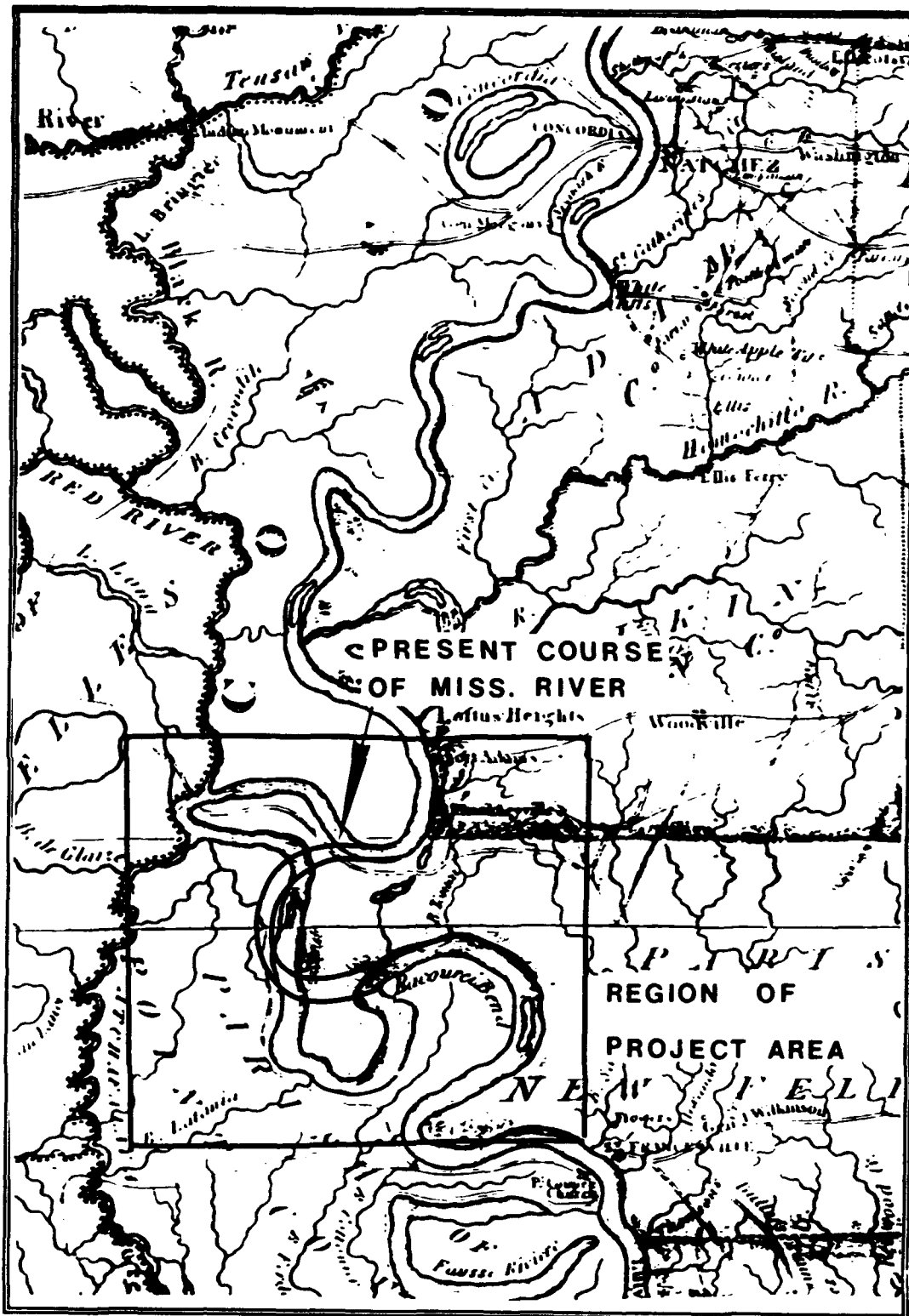


Figure 16: Detail of William Darby's map accompanying *A Geographical Description of the State of Louisiana* (1816).

levee several miles upstream at the Pointe Coupee community. This inundated the land opposite Port Hudson and made it useless to the Union troops harassing the Confederate position (Bergeron in Riffel 1983:50-51).

Port Hudson fell to the besieging Federal forces in early July of 1863 and its capture assured complete Union control of the Mississippi. In an attempt to disrupt Federal commerce and troop movements on the river, a Confederate cavalry force crossed the Atchafalaya and entered Pointe Coupee Parish in September of 1863. The Union army responded by dispatching 4,000 men to Morganza to drive the cavalry out of the parish and protect that stretch of the river from future raids.

The Confederate leader withdrew his forces back across the Atchafalaya, but began planning an attack on an advanced Union position at Stirling Plantation on Bayou Fordoche approximately seven mile from Morganza. The Confederates attacked on September 29, 1863 and captured the Federal position. With victory secured, the Confederates retreated back across the Atchafalaya making this engagement the largest Civil War battle to have occurred in the Pointe Coupee area (Bergeron in Riffel 1983:51; Winters 1963:297).

Federal forces withdrew from the Pointe Coupee area in October 1863 and left a void that was quickly filled by the Confederates. They set up an artillery battery on the banks of the Mississippi River at Hog Point, near Red River Landing. From this position they harassed Federal shipping for four days. A Union transport was shelled and set afire during this engagement (Bergeron in Riffel 1983; Bragg 1977:198). Confederate positions in the Pointe Coupee region were abandoned in late 1863 as troops withdrew to northern Louisiana when the Confederate state capitol was moved to Shreveport.

After some months of relative tranquility, the Civil War returned to Pointe Coupee in May of 1864. Having abandoned his Red River Campaign and having begun a retreat to Union occupied Louisiana, Union General Nathaniel Banks encamped at Morganza. He left approximately 36,000 men there to protect occupied Louisiana from Confederate forces still operating in western and northern Louisiana.

When Confederate armies surrendered in the spring of 1865, the residents of Pointe Coupee, like the rest of the South, had the unenviable task of surveying the damage and trying to reestablish their lives. The destruction of combat could be seen around them. Also, there was the toll exacted in keeping both Union and Confederate armies functioning. Horses, mules, and livestock had been confiscated by both forces and all forms of machinery had been pillaged for use of the iron and steel. In addition, the levee system suffered from four years of damage and neglect. This was made all too clear when floods ravaged virtually all of Pointe Coupee Parish in March of 1867 (Taylor 1974:345).

After a relatively brief period of readjustment, the antebellum social and economic system of Pointe Coupee Parish emerged remarkably unchanged. Large plantations dedicated to the production of cane and cotton continued to dominate the economy and the owners of

these plantations controlled the government. The most significant change, of course, was the abolition of slavery, but the change was perhaps more in form than in substance. The former slaves returned to agricultural labor as sharecroppers or tenants in the cotton culture or as wage earners on sugar cane plantations. In many ways, this arrangement of large farms, often with absentee owners, worked by wage labor or sharecroppers continues to the present.

The population of Pointe Coupee Parish rose rapidly in the nineteenth century from 4,539 in 1810 to 25,777 in 1900. Since the turn of the century, however, population has remained more or less steady, with some changes downward, so that the 1980 population was 24,045. New Roads is the parish seat with other incorporated population centers being in communities such as Morganza, Innis, Livonia, and Fordoche. In many ways New Roads has become a suburban community to Baton Rouge, but agriculture dominates the local economy. Pointe Coupee has one of the highest percentages, 23.1, of families living below the poverty level in Louisiana (Calhoun 1988).

In the region of upper Pointe Coupee Parish closest to the study area, Innis and Batchelor are the most significant communities. The portions of Concordia and West Feliciana Parishes within the project area are not near any incorporated towns of those parishes.

History of the Mississippi River and the Project Area

Because the Mississippi River has directly influenced the project area and the history of the surrounding region, a discussion of the river and historic events, projects and occupations relating to it are in order.

From prehistoric times through the earliest days of European exploration, and into the twentieth century, the Mississippi River served as a major artery for the travel of men, goods, and ideas. Before the invention of the steam engine, however, most of this travel was understandably downstream. Trails or traces served as one means for river travelers to return upstream to their points of origin. The most famous of these traces was the Natchez Trace which played an integral part in the settling of the Lower Mississippi Valley in the late-eighteenth and early-nineteenth centuries.

Along the river, aside from the ports to be found at large river cities like St. Louis, Memphis, and New Orleans, many landings sprang up to provide access to the river and allow the on and off loading of people and products. These landings were associated with smaller towns which may have been somewhat back from the river to avoid flooding, and served as connections for rail heads or plantations. Some landings consisted of ramps, wharfs, storage structures, and well maintained roads, while others had nothing but perhaps a rutted track to distinguish them from the line of vegetation seen along the river bank while traveling on the Mississippi.

In the project area, several landings are noted on historical and current maps on the west bank of the Mississippi. Figure 17 notes the location of these as close as can be determined on the current channel of the river. It should be understood that because the channel has migrated almost a kilometer westward in portions of the study area (See Chapter II) many of the original landings and attendant features have long been washed away.

Of all the landings within or near the study area, Torras Landing and Red River Landing were probably among the most significant and widely used. The Red River Landing near the confluence of its namesake with the Mississippi was an important point for the flow of "immigration, mail, and traffic between the Mississippi, Red and Ouachita Rivers" and was reportedly one of the largest transfer points between Memphis and New Orleans. There was a wharf, a hotel, and the terminus of a stage coach line that ran westward to Shreveport. A post office was established there as early as 1836, but was moved to Torras in 1902 (Riffel 1983:33). Absolutely no sign of such a settlement remains where the Red River Landing is noted on recent maps.

The Torras Landing was on the river to serve the town of Torras which was named for Joseph Torras, a native of Spain, who settled in upper Pointe Coupee in 1845 with his brother. Cotton trading and mercantile activities supplying surrounding communities with the necessities and luxuries of life initially engendered optimism for the future growth of the town. In fact a spur line of the Texas and Pacific Railroad ran to Torras and on to the river, but was eventually abandoned. A new railroad bridge and highway at Simmesport, Louisiana eventually cut off Torras and led to its decline as a railhead off the river. Currently, there is nothing in the area where the Torras Landing is located to indicate a spot of commerce and activity. A gauging station is all that remains. The town of Torras has also declined and the only commercial establishment is a crossroads store.

Other landings noted on recent and historic maps are Lum Landing in Concordia Parish. This landing was also referred to as Glendale Landing. It served the nearby Glendale and Lum Plantations. The Smithland Landing is located downstream from Red River Landing. This spot undoubtedly served the Smithland Plantation which is also noted on recent maps. Downstream from that are Miles Landing, White Flag Landing, Tucker Landing, and Hog Point Landing. Across the river from the project area, Tarbert Landing served the Tarbert Plantation; Angola Landing was across from the Red River Landing; and Rowes Bayou, Tunica and Trudeau Landings were located respectively where Rowe's Bayou, Tunica Bayou and Pollock's Bayou entered the Mississippi River from the east. The latter two landings were at the foot of the Tunica Hills. There was no observable evidence on the river banks at the locations of these landings to indicate a scene of historical activity.

On Raccourci-Old River several plantations, and landings to serve them, must have existed before this area was cut off from the main channel of the Mississippi River. In fact

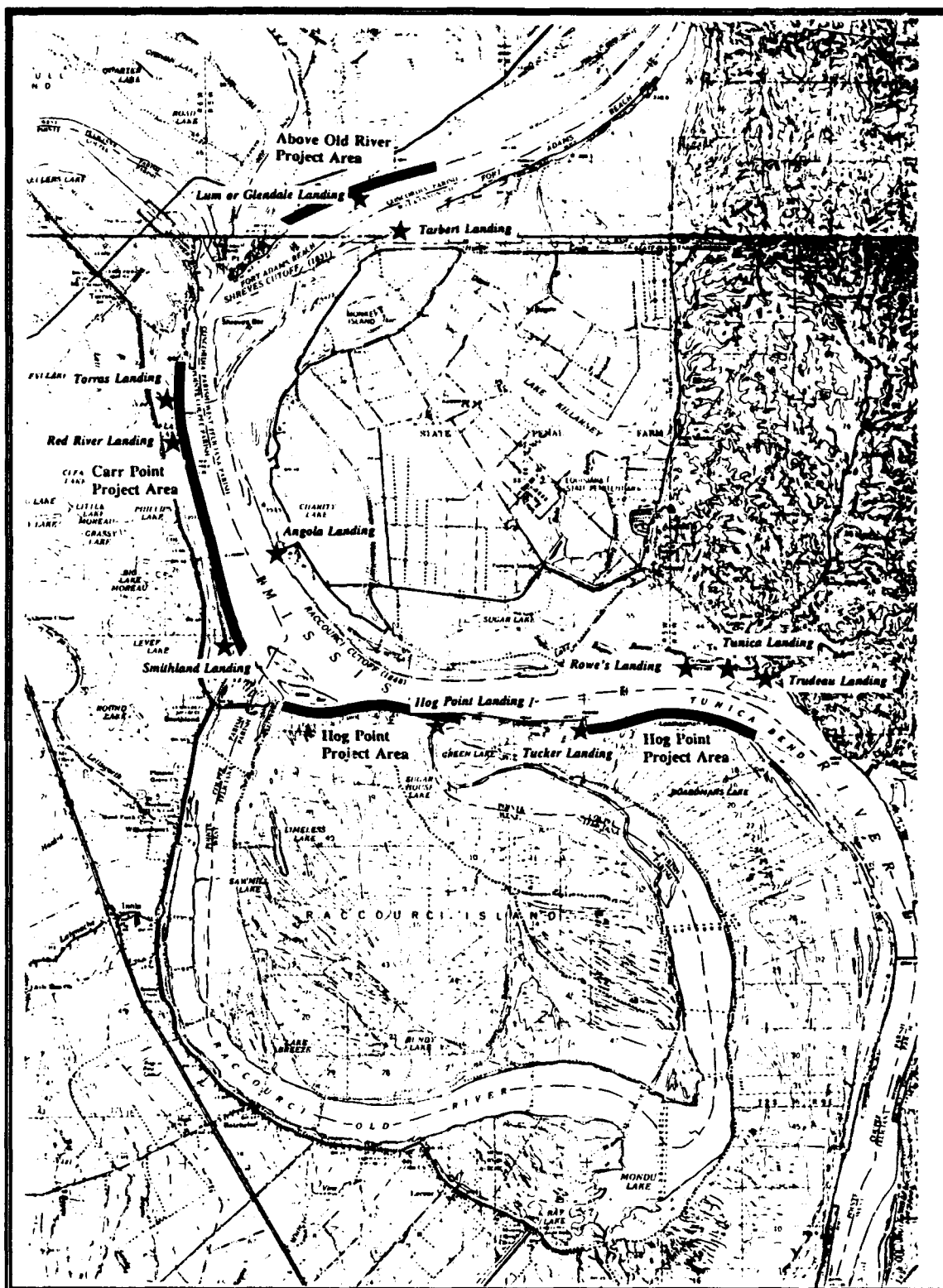


Figure 17: Location of known river landings in region of project area. Adapted from 15' USGS Artonish quadrangle (1963).

a 1778 map (Figure 18) shows a community called Raccourci, (French for shortcut), at the southern end of the Tunica Bend. This community, somewhat above the Pointe Coupee settlements, was no doubt named for the idea that a portage across the southern neck of Tunica Bend would shorten a river journey by more than 10 miles. A post office was established there in 1885, but moved to Brownview in 1915. No evidence of a community remains in the area where early maps placed the town.

Another indicator of past historical activity at the landings in the study area is the number of recorded ship wrecks. Several are known to have taken place, most in the 19th century, at some of the landings in or near the project area. Table I provides the details of the shipwrecks from the mid-nineteenth to the early twentieth century when steamboat travel was greatest.

Also the region around the project area was the scene of two major engineering projects in the nineteenth century that were described in Chapter II. As Figures 1 and 17 show, the Mississippi River at one time had two meanders that added 30 miles to river travel. The first project was an attempt to cut this mileage by creating man made cutoffs through the neck a meander that contained the confluence of the Red River and the headwaters of the Atchafalaya River. The natural cutoff at False River recorded historically was no doubt the inspiration for this endeavor.

Captain Henry Shreve, later to be famous for his clearing of the Great Raft on the Red River, was in charge of the work to complete this cutoff. Working for the War Department, he was given the general directive to make navigational improvements on the "western waterways" of the United States (McCall 1984). He dug a straight ditch approximately 7000 feet long which reportedly shortened the travel distance on the Mississippi significantly. Such a project was seen as desirable at a time when canals were being dug all over the United States and seen as part of the infrastructure leading to economic development and prosperity.

However well-intentioned, this project caused problems almost immediately. Sand bars began to form at the mouth of the Red River almost immediately and dredging had to begin soon after the cutoff was completed (Pfaff 1927:206). Also, the head waters of the Atchafalaya River began to fill with debris and it soon became unnavigable. The State of Louisiana removed the raft of debris that had begun to fill in the Atchafalaya in 1839 and the stream quickly enlarged and deepened its channel (Bragg 1977). Today, migration of the Mississippi has caused the river's channel to move northwest from the original Shreve's Cutoff. A dead end channel, called Shreve's bar, is still depicted on the maps and observable from the river.

Because the confluences of the Atchafalaya and Red Rivers with the Mississippi were altered by this cutoff, several problems developed that are still in the process of being remedied. By the late nineteenth century, the Red River had changed its course, abandoned

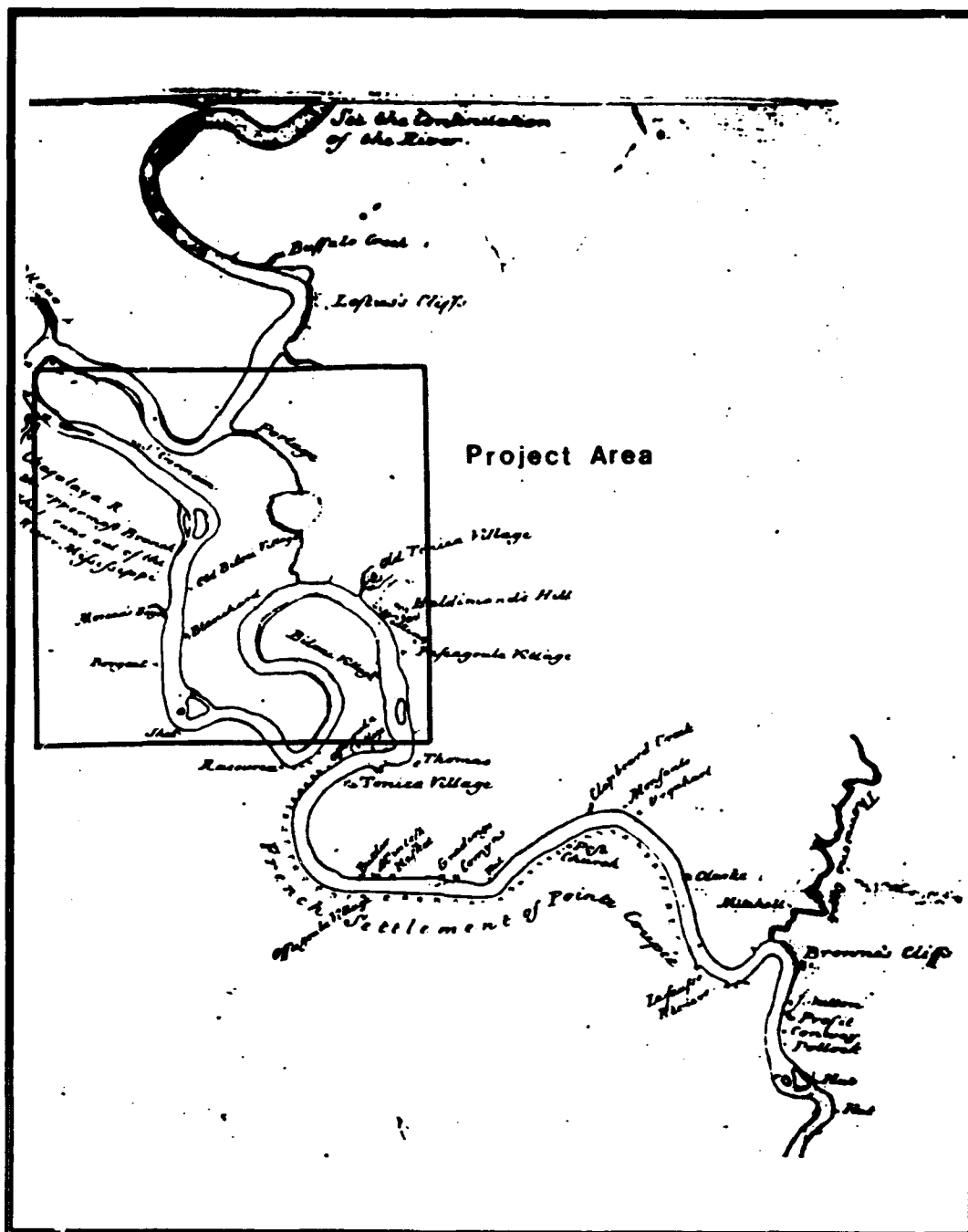


Figure 18: Detail from Gauld's 1778 map *A Plan of the Coast of Part of West Florida and Louisiana*.

TABLE I
RECORDED SHIPWRECKS AT LOCATIONS IN OR NEAR THE PROJECT AREA

| YEAR | SHIP NAME | CAUSE | LOCATION | CASUALTIES |
|------|------------------|-----------|---------------------------|------------|
| 1830 | William Tell | Exploded | Torras, La. | 5 |
| 1837 | Swan | Snagged | Angola, La. | 0 |
| 1841 | Clarksville | Snagged | Red River Cutoff | 2 |
| 1841 | Creole | Burnt | Torras, La. | 34 |
| 1853 | W.A. Violet | Burnt | Torras, La. | 0 |
| 1854 | Gipsy | Burnt | Torras, La. | 5 |
| 1866 | Mary A. Bruner | Burnt | Mouth of Red River | 0 |
| 1868 | General Quitman | Snagged | Angola, La. | 0 |
| 1877 | Charlie Durfee | Collision | Mouth of Red River | 0 |
| 1878 | Ella Hughes | Snagged | Mouth of Red River | 0 |
| 1887 | Peninah | Snagged | Red River Landing | 0 |
| 1888 | John S. Baird | Snagged | Smithland Landing | 0 |
| 1890 | T. P. Leathers | Burnt | Point Breeze | 19 |
| 1910 | F.C. Loxley | Foundered | Carr's Point | 0 |
| 1912 | William Edenborn | Snagged | Old River at T & P Bridge | 0 |
| 1912 | Bob Blanks | Burnt | Raccourci Landing | 0 |

Sources: Berman 1972; Lytle 1952; and WPA 1937.

its old mouth and joined with the head waters of the Atchafalaya. The former lower end of the meander that was eliminated by Shreve's Cutoff, became known as Old River. It was the only link between the Mississippi and its former attendant streams. The flow in this channel for a while flowed east or west reflecting the flow levels of the rivers involved. By the 1880's, however, it was reported that the Atchafalaya was constantly receiving flow from the Red and Mississippi Rivers. Some observers realized that eventually the Atchafalaya could capture the full flow of the Mississippi and that the current downstream channel would become the distributary. The Old River Control Structures, authorized to be built in 1954, are an effort to avoid this attempt by the Mississippi to seek the shortest course (140 vs. 320 miles) to the Gulf. In many ways, the problems the Control Structure seeks to ameliorate began with the construction of Shreve's Cutoff.

In the late 1840s, however, it seemed to many people that Shreve's Cutoff was a resounding success. The mileage on the river had been cut by many miles and the treacheries to navigation caused by the entry of the Red and the exit of the Atchafalaya were now avoidable. The State of Louisiana reasoned that another cutoff was possible in the area around Tunica Bend that would shave a further 19 miles off a river journey. In 1844 the Legislature of Louisiana passed a resolution instructing the Civil Engineer of the State of Louisiana to:

repair to the Raccourci Bend, on the Mississippi....and immediately cause the Cut-off [sic] (hitherto contemplated) to be made at the said Raccourci Bend, commencing at a point above Barker's Settlement, and to connect the River.... with the head of Tunica Bend, above Tunica Bayou, to cause the whole currents of the said River to pass through the same (Louisiana Legislature, 1844, Resolution No. 89).

The work on the Raccourci Cutoff proceeded slowly, however, and with some apparent objections by a great many people. For example, P.O. Hebert, the State Engineer, issued as report to the legislature in 1846 that quoted surveying data that showed a ditch seven-eighths of a mile and accommodating a fall in the river's level of two feet six and a half inches would be necessary to successfully divert the river. He advised against creating the cutoff. He cited seven negative consequences of the project that he felt would result. These consequences were: 1) an increase in quantity and velocity of water downstream from cutoff; 2) the increase sedimentation from Shreve's Cutoff; 3) the tendency of the River to attempt to return to its former course; 4) the illegality of the State working on a "national river"; 5) the elimination of river travel to those isolated by the cutoff; 6) the increased possibility of floods downstream; and 7) the demise of the Atchafalaya for transportation (Louisiana State Engineer's Report 1846:8-11).

Mr. Hebert's objections were swept aside, however, by a Louisiana Senate Committee on Internal Improvements concerning the Raccourci Cutoff. This committee issued a report that reviewed his objections item by item and included the testimonies of residents along the river and boat captains supposedly very familiar with the region. The majority of the committee concluded that the cutoff was a feasible project and recommended that it be pursued. Opposition to the plan was recorded in the report, however, which would seem to indicate that the matter was very seriously considered (Louisiana Legislature 1846).

The State Legislature authorized completion of the Raccourci Cutoff in its 1847 session with the appropriation of \$6,000 to the State Engineer. This appropriation was made despite Hebert's continued objections to the plan. His 1847 report to the State Legislature plainly stated: "I see no reason to change my views with regard to the 'cutoff' at Raccourci bend. It can plainly do no possible good to the navigation of the

Red River, and must certainly cause serious injury to the lower portion of the State (Louisiana State Engineer's Report 1847:6)."

The Raccourci Cutoff was completed and reported upon to the State Legislature by a new state engineer, R. T. Williams in 1848. Whether or not the change in this position was caused by Mr. Hebert's objections to the cutoff can not be determined. In any event, Mr. Williams reported that a Capt. Laws reached Raccourci with "twenty-three newly purchased hands" and commenced operations on the 4th of June (1847). He went on to report that Laws continued work until the 4th of July when "the alarming symptoms of sickness amongst the newly purchased, and unacclimated negroes, who could not endure the exposure to a nearly vertical sun" caused work to stop. The slaves that were apparently the property of the State of Louisiana were then transferred to work on levees upstream (Louisiana State Engineer's Report 1848:36).

Williams went on to report that the Raccourci Cutoff project was then completed under contract to a Mr. D. Hoard for \$12,000. Hoard was required to complete the main ditch of the cutoff. The work that had not yet been completed was a canal 30 feet wide at top, twenty feet wide at bottom, at least 15 feet deep, and 4290 feet long. Lateral drainages off the main ditch were also to be dug and the total moving of 76,963 cubic yards of dirt was to have been completed by January 1848.

Williams stated that he had visited the site of the project on Christmas Day of 1847 and that the work was almost completed. He reported that Hoard was having difficulty keeping the Mississippi from topping over the temporary dam he had constructed to make it possible to complete the ditch. During that visit supposedly only 1500 cubic yards were left to move to complete the cutoff. In his report to the Legislature in January of 1848, Williams said that the Mississippi had topped the dams, entered the ditch, and was passing through "with great velocity." He judged the project complete, although Hoard had not been able to do all that his contract had called for, and urged that the State Legislature honor the terms of the previous agreement (Louisiana State Engineer's Report 1848).

Although the Raccourci Cutoff has long been the main channel of the Mississippi, this did not happen immediately. Flow continued around Raccourci Island for a few years before batture development led to the formation of an oxbow lake now known as the Raccourci-Old River. This bifurcation of the Mississippi's main channel apparently caused some navigation problems that are even alluded to by Samuel Clemens in his book *Life on the Mississippi*. Clemens recounts a no doubt apocryphal story about one boat that took the former channel of the river unaware that the cutoff had been made and was unable to get back to the main channel. Clemens reported that:

More than one grave watchman has sworn to me that on drizzly, dismal nights, he has glanced fearfully down that forgotten river as he passed the head of the island, and seen the faint glow of the spectre steamer's lights

drifting through the distant gloom, and heard the muffled cough of her 'scape-pipes and the plaintive cry of her leadsmen (Twain 1901:138-139).

The Raccourci Cutoff did, of course, shorten the mileage of a river trip, but its affect on this portion of the Mississippi as significant. Several plantations and towns were cut off from access to the Mississippi. The oxbow lake has only an occasional confluence with the Mississippi at the lower end of the former meander through a feature called The Narrows. The Narrows is a small stream that flows through the developing batture at that end of the Raccourci-Old River Lake and presents a canyon like vista during low water as was the case during the field work for this project. Eventually this stream will completely fill in and the batture development will continue until the entire Raccourci-Old River lake is a meander scar rather than a body of water (Gagliano and Howard 1984).

A further result of both the Shreve's Cutoff and the Raccourci Cutoff was to isolate portions of West Feliciana Parish from its main body. The original boundaries for the parish had been drawn through the middle of the original channel of the Mississippi River. This channel changed with the cutoffs, of course, but the political boundaries remained. Consisting entirely of floodplains, Shreve's Cutoff created Turnbull Island with an area of about 8.5 square miles. The Upper Channel of the Old River has since silted in and Turnbull Island is no longer an island although the designation still occurs on up to date maps. The Raccourci Cutoff resulted in the creation of Raccourci Island with an area of about 16 square miles. This feature is also no longer technically an island. Rather, the batture in the upstream portion of the Raccourci-Old River oxbow lake has silted in completely and connects the island to the mainland. Both islands are sparsely inhabited and most structures consist of seasonally occupied hunting camps.

CHAPTER V

PREVIOUS ARCHEOLOGICAL INVESTIGATIONS NEAR THE PROJECT AREA

The region around the project area has witnessed significant scientific archeological investigation since at least the early twentieth century. Some of this research was conducted by eminent researchers whose work and interpretations have contributed significantly to the directions of archeology in North America. Also, several cultural resource surveys have been carried out and have contributed to the record of human occupation in the region. Figure 19 presents the locations of all reported archeology sites in the region of the project area.

The first archeological investigator of record in the region was Clarence Bloomfield Moore. Moore was the scion of a wealthy Philadelphia family whose voyages along rivers throughout the southeast in his private steamboat, the "Gopher," contributed significantly to the archeology of the day. While Moore's orientation to mound sites and his excavation techniques may be criticized by modern archeologists, he was at least conscientious about publishing his reports quickly and he made a record of many sites that have since been destroyed or completely altered (Moore 1909, 1911, 1912, 1913).

Two of Moore's trips on the Gopher relate directly to the current project area. In 1910 and early 1911, Moore investigated aboriginal sites along the Mississippi River traveling upstream from New Orleans to Wilson, Arkansas. One of the first spots he investigated on this particular journey was the Trudeau Landing site in West Feliciana Parish. He found "black soil, indicating former aboriginal occupancy" and a smoking pipe of "catlinite" (Moore 1911:376). In addition he reported on various objects of iron and steel and "debris" from dwelling sites, by which he probably meant pottery sherds. No graves were found by Moore and, because this was a primary focus of his research, the impression one gets from his report is that he was rather disappointed with the site. It is ironic that the Trudeau site, 16WF25, turned out to be a site renowned for its burials and associated artifacts 60 years later (see discussion below).

During the same journey, Moore also visited a mound site near the Glendale Landing in Concordia Parish, Louisiana. He reported on fifteen burials; gave the measurements of the mound; and presented a photograph of a small bowl that was found in association with a burial in the mound. The site, while adequately described using the methodology employed by Moore, appeared not to receive as much attention from Moore as other sites where many more artifacts were recovered.

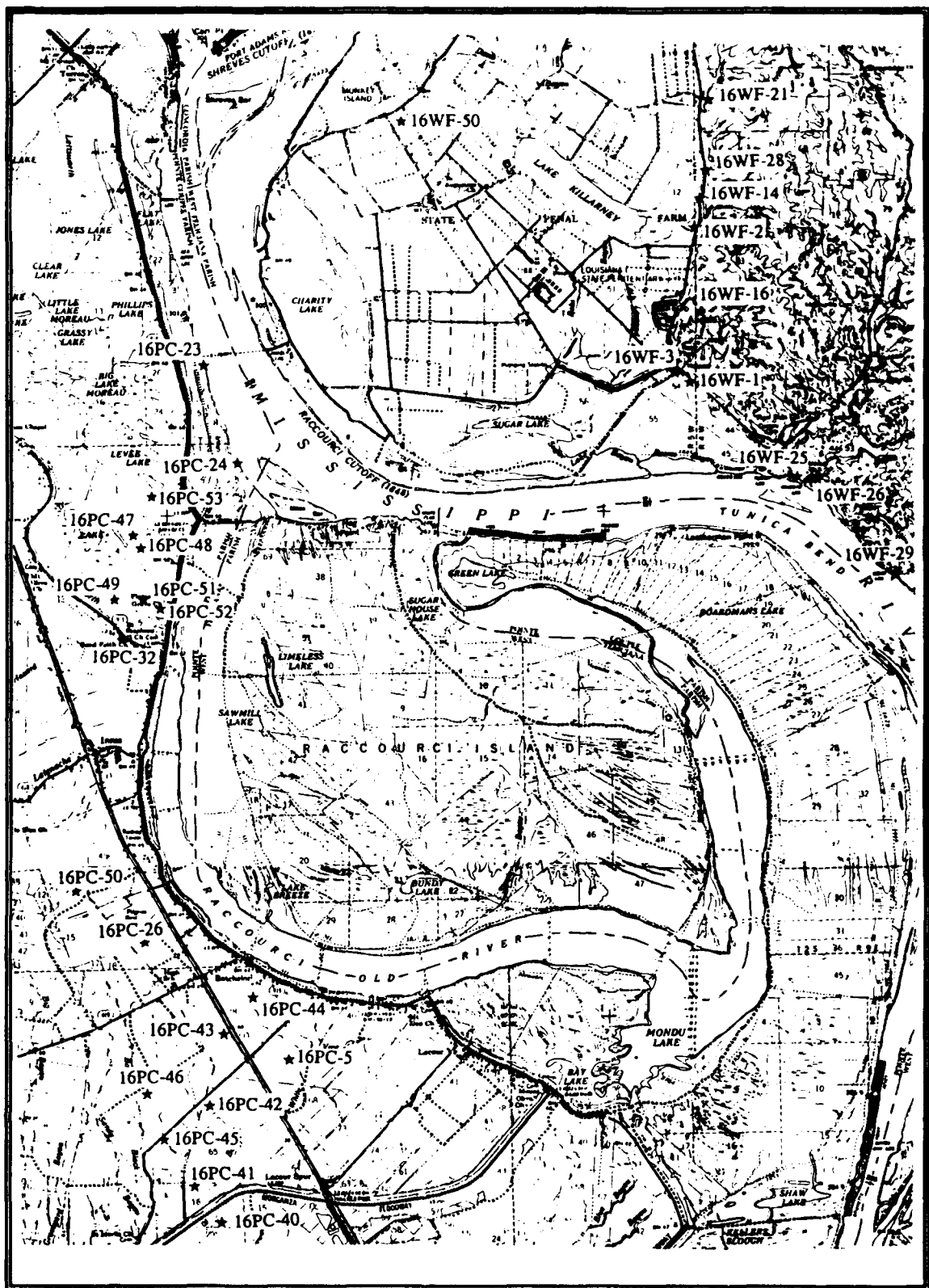


Figure 19: Location of reported archeological sites in region of project area.

Moore reported that the mound was roughly circular in outline with a basal diameter of 100 feet. He estimated that the height of the mound was about four feet. Furthermore, he thought the mound contained "many burials, as eight trial-holes came upon seven interments, and in the removal of these eight more were discovered (Moore 1911:376)." He went on to report that none of the graves were deeper than two feet below the surface of the mound and that only one item of burial furniture was found, in the grave of a child. This vessel, which is a flat bottomed bowl, was collected by Moore, photographed, and presented in his 1911 report. While a photograph cannot always allow an undisputed classification of an aboriginal vessel, the markings on the bowl suggest a Maddox Engraved type. Moore also reported that several burials in the mound were accompanied by masses of red pigment or yellow ocher. He noted that ceramic sherds were found in the fill of the mound during his excavations for burials, but he did not apparently think any of these were worth noting. He also found a "slender barbed arrowhead of flint (Moore 1911:377)."

Another site near the project area that Moore investigated during a journey up the Red River in 1911 and 1912 was the Keller Place site in Pointe Coupee Parish, Louisiana (Moore 1912). This site is now designated as 16PC7, the Lettsworth Bayou Mound, named after the nearest stream. This mound is approximately 3.1 miles northwest of the Carr Point portion of the project area (See Figure 19).

Moore described the site as consisting of a mound with the dimensions of "9 feet 8 inches in height and 109 feet by 86 feet in basal diameters (sic), the summit plateau being 43 feet by 36 feet (Moore 1912:489)." He noted that the mound was in a cultivated field and that cattle had apparently long grazed over the mound, contributing to its erosion and its less than symmetrical appearance.

Moore believed that the Lettsworth Bayou Mound was primarily "domiciliary," but his party produced evidence of no less than 57 individual burials and he noted that the mound had apparently been built in stages with burials interred in the mound's summit before the construction of an overlying level of earth was added. Human remains were found very close to what was then the surface of the mound. As for artifacts accompanying the burials, Moore noted that it was "seldom ...our fortune to investigate a mound in which the remains of the dead were accompanied by so few artifacts (Moore 1912:491)."

Moore reported that a total of only six stone projectile points and scattered ceramic sherds were found, none of which exhibited decoration of any sort. In his report, he presented a photograph of one projectile point from the site in his report is a Friley or Gem Point (Webb 1981), a very unusual projectile type because of its upward-projecting barbs. Webb has noted that these point types are mostly distributed over northwest Louisiana, making the presence of this point at 16PC7 uncharacteristically far to the east.

There was a hiatus of over 25 years before there was any further archeological investigation in the region. In 1936, James A. Ford, then affiliated with Louisiana State University, investigated several sites on the east bank of the Mississippi at the base of the

Tunica Hills in the general region of Angola Prison Farm. He reported on the Angola Farm site, now designated as 16WF2 (See Figure 19), and noted that this was a Houma village visited by Iberville in 1699 and noted by other French explorers and settlers for a few years afterward. Ford also noted the course of the river in a great bend to the west which was then the mouth of the Red River (Ford 1936:129-132). This combination of a confluence of two major streams, a portage that cut the distance of a river considerably and terrain that was somewhat elevated above the Mississippi River Flood Plain no doubt made this an enviable location for aboriginal occupation.

Cultivation at the prison farm in 1934 revealed human burials that led to archeological investigation by Ford soon afterward. The LSU sponsored project excavated 10 aboriginal burials that were accompanied by apparent European trade items as well as articles of Indian manufacture. The pottery types found in these burials served as horizon markers for contact period artifacts that contributed to Ford's construction a ceramic chronology for the Lower Mississippi Valley and other portions of the southeastern U.S. (Ford 1936; Ford 1951).

The Tunica Mounds (16WF1) were also investigated by James Ford in 1934, presumably in conjunction with his work at the Angola Prison Farm site. The site files at the Louisiana Division of Archaeology show that Ford only noted the existence of the mounds and their partial destruction by railroad and highway construction. He also made an artifact collection of "4 sherds, 5 pieces of glass, 2 pieces of porcelain, 1 iron, and 2 misc. clay (DOA site files)." Ford apparently never conducted a more extensive investigation of this site, nor included any information about it in any subsequent reports.

Sometime in the 1930s, the Angola Prison Gate Mound site (16WF3) was completely levelled by the construction of the hospital at the Prison. This destruction did not occur before Dr. Fred B. Kniffen of the Geography and Anthropology Department at Louisiana State University investigated the fill from the site and reported that there were many burials, some historic, and that there were also 74 "clay squeezes" or Poverty Point objects (DOA site files, Jones and Shuman 1986).

Another hiatus of archeological activity in the region of the project area lasted from Ford's work in the 1930s until the activities of Angola Prison guard Leonard Charrier in the late 1960s which led to the discovery and plundering of the famous Tunica Treasure at the Trudeau Landing site (16WF25). This site is directly across the Mississippi River from the most downstream portion of the Hog Point segment of the project area. While Charrier's recovery of thousands of European and aboriginal artifacts were not excavated in a scientific manner and the provenience data lost forever, these excavations did lead to an orderly analysis of the artifacts by Jeffrey P. Brain of Harvard University (Brain 1979) and subsequent research at the Trudeau Landing site (Brain 1982).

Brain's series of excavations at the Trudeau site have attempted to locate more burials for provenience information to investigate the more prosaic elements of the site such as middens and house sites that can tell more about the lifeways of a community than burials.

An intriguing result of Brain and his associates' research was the discovery of a building site that contained metal nails and pieces of daub. This building may have combined European and aboriginal construction techniques and have been a structure of some importance. Brain suggests that it could have been a temple and charnel house at the site (Brain 1982:10).

Across the Mississippi, near Innis, Louisiana, the members of the Lower Mississippi Survey (LMS) reported on the possible location of a historic Tunica village site at 16PC32 in 1975. The location of this site was reported based on study of early historic maps of the region, although the original report does not cite a specific map (DOA site files). The site files do report, however, that some historic ceramic sherds classified as *Westerwald* were collected. Also, a nearby stream, Bayou Latanache, which would seem to be a former small distributary of the Mississippi when it ran through the Raccourci-Old River channel (See Chapter II), is reputed to have been named after an eighteenth century Tunica chief (Riffel 1983:27).

The Bloodhound Hill site (16WF21) was reported in 1976 by Ross Maggio, then warden of Angola Prison, to various archeologists in Louisiana. Located on the eastern portion of the Tunica Hills (See Figure 19) on a terrace and a hill east of the terrace, the site was surveyed, tested and excavated by a crew from the Louisiana Division of Archaeology, the Peabody Museum at Harvard, Louisiana State University, and some inmates at Angola Prison. The work at the site revealed seven burials and a midden area that was somewhat disturbed. Several of the burials contained a large number and a wide variety of European trade goods reminiscent of the Tunica Treasure, as well as articles of aboriginal manufacture (DOA site files; Neuman 1984).

In 1986 and 1987 Dennis Jones and Malcolm Shuman, then with the Museum of Geoscience at Louisiana State University, conducted a project to locate and map prehistoric Indian mound sites in the region around the project area. In 1986, the Tunica Mounds (16WF1) were investigated and mapped (Figure 20). The site, as noted by Ford in the 1930s, had been disturbed by nearby railroad and highway construction. The railroad had sheared the northern portion of Mound A and Highway 66 had sheared the southern side of Mound A and disturbed the much smaller Mound B (Jones and Shuman 1986).

Initially, there was some skepticism that Mound A was a man made construction. This is the area where the Tunica Hills meet the floodplain of the Mississippi River and many promontories in the area are natural formations so that it appeared to Jones and Shuman that Mound A may have been such a feature. However, when the vegetation was cleared for mapping purposes, seven plain sherds were exposed, lying *in situ*, several feet below the mound's summit. Likewise, a plain sherd was found in the northern face of Mound B several inches below the mound's current summit. Jones and Shuman concluded that while it is possible that the builders of these mounds may have supplemented a natural

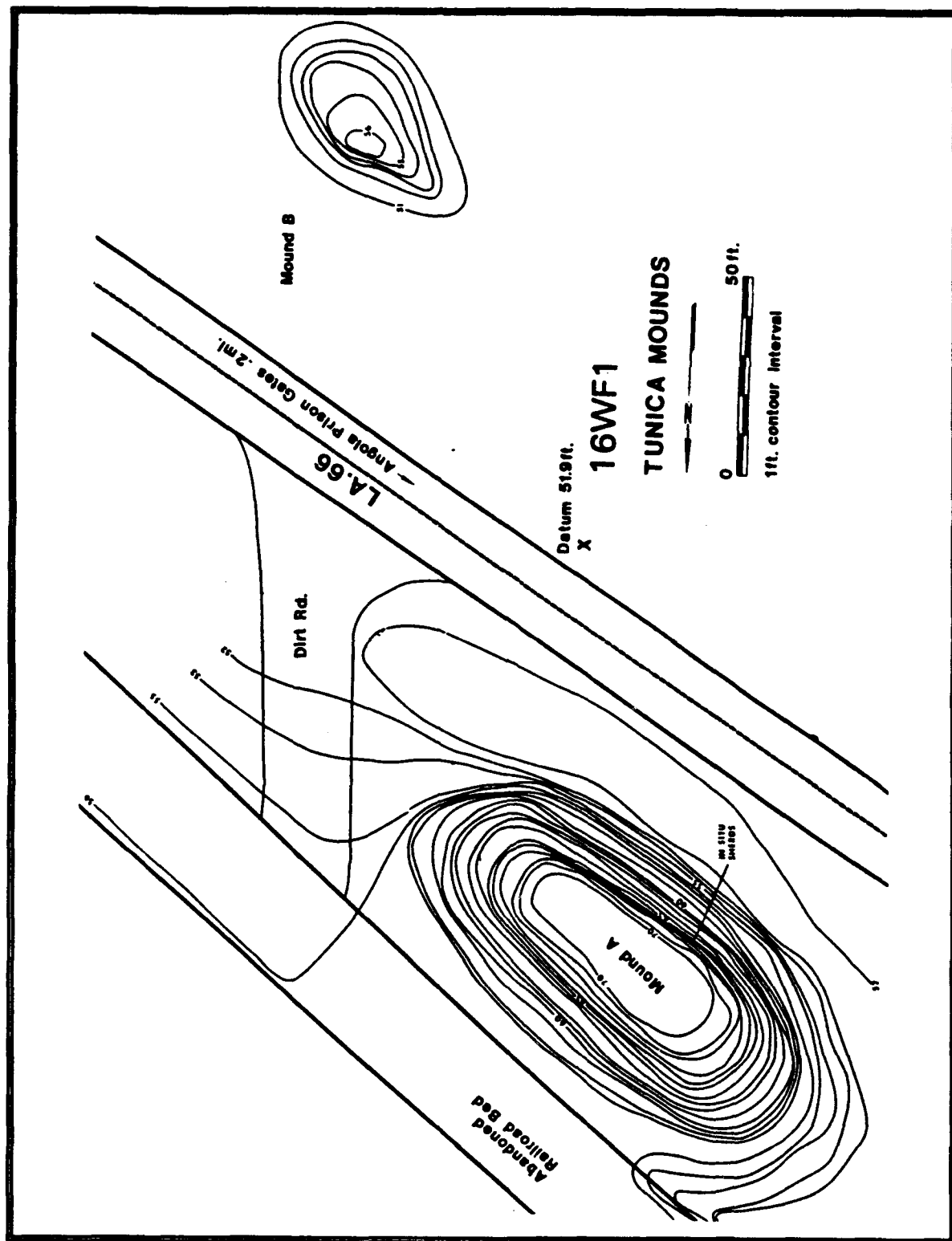


Figure 20: Contour map of mound remnants at the Tunica Mounds site (16WF1). Source: Jones and Shuman 1986.

prominence in the case of Mound A, there can be little doubt that at least a portion, if not all, of the mounds at 16WF1 were man-made constructions. If Mound A was, in fact, completely man-made, it was a structure of some size measuring more than 18 feet from base to summit and 135 feet along its surviving basal dimension (Jones and Shuman 1986).

In 1987, Jones and Shuman, working on the west bank of the Mississippi River, investigated and reported upon two mound sites that are in the general region of the project area: Monk's Mound (16PC5) and Lettsworth Bayou Mound (16PC7) (Figures 21 and 22). As noted, 16PC7 had been previously investigated by C.B. Moore, but this fact had not been incorporated into the site files at the Louisiana Division of Archaeology. Jones and Shuman found the mound's dimensions to be 9.8 ft high with basal dimensions of approximately 130 x 120 ft and concluded that the mound was a pyramidal platform structure which agreed with Moore's assessment that the mound was "domiciliary." These measurements compare relatively well with C.B. Moore's, although the basal dimensions are somewhat larger (Jones and Shuman 1987:157-158).

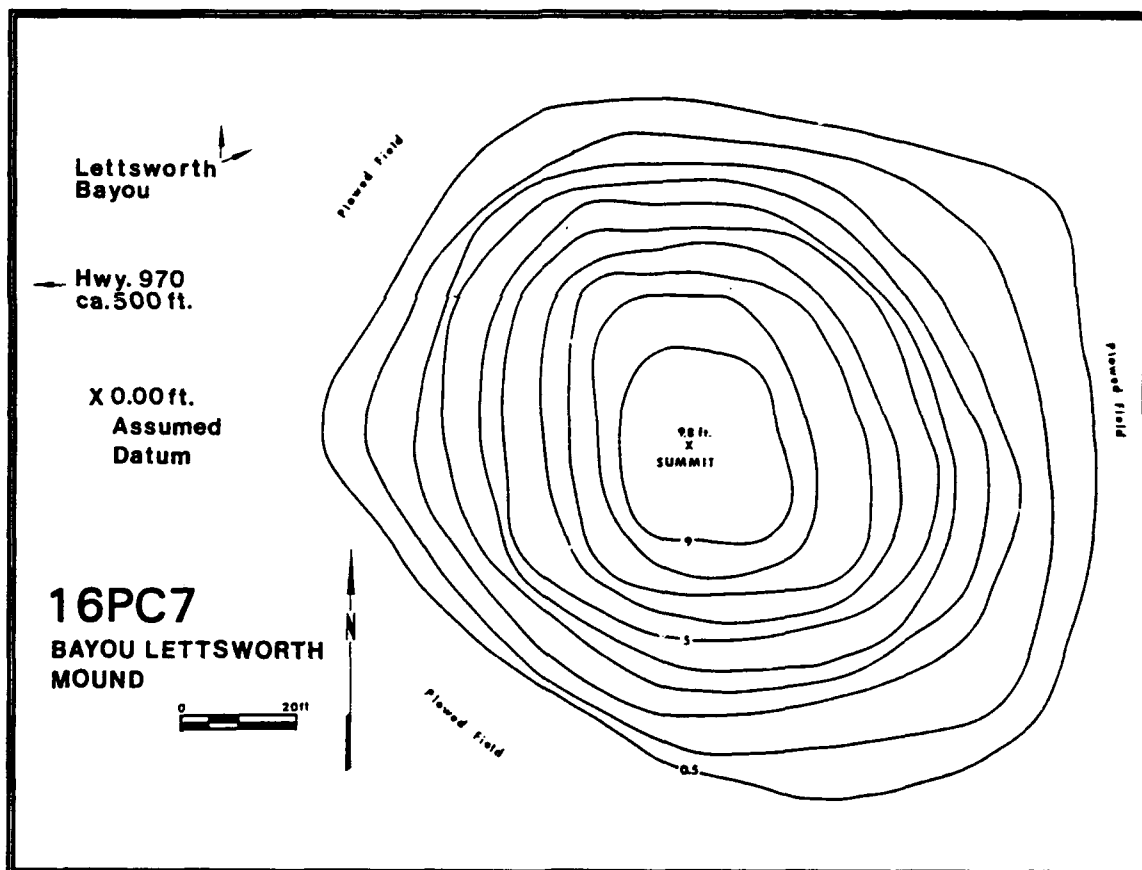


Figure 21: Contour map of Bayou Lettsworth Mound (16PC7). Source: Jones and Shuman 1987.

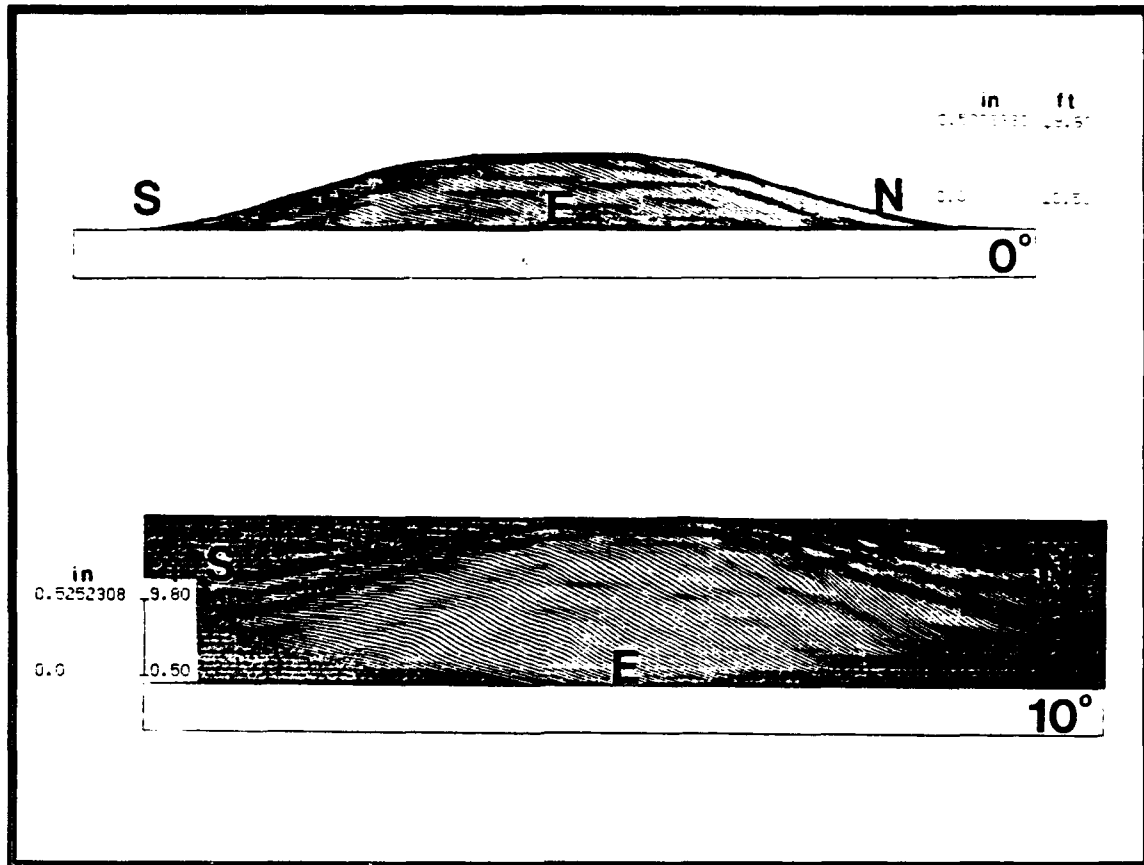


Figure 22: Computer graphic of Bayou Lettsworth Mound (16PC7). Source: Jones and Shuman 1987.

Jones and Shuman also noted that the mound is on the natural levee of Bayou Lettsworth, a stream that was apparently once a tributary of the Mississippi (See Chapter II). Currently, however, there is no water in the bayou due to cultivation and alterations of natural drainages. In addition to the artifacts reported by Moore, a site report from 1977 on file at the Division of Archaeology filled out by Neuman, Toth, and Byrd cited ceramic evidence of a "middle and late Coles Creek" component at the site (DOA site files). A surface collection during Jones and Shuman's investigation recovered ceramic artifacts that indicated an occupation from the Coles Creek Period as well as possibly the later Plaquemine Period. Lithics in the form of a chert core and flakes were also found on the mound's surface (Jones and Shuman 1987:229).

In *Early Marksville Phases in the Lower Mississippi Valley: A Study of Culture Contact Dynamics*, Alan Toth investigated several sites that defined and refined the data on the development of the Marksville Culture. Written in 1977, Toth reported upon several sites, including Monk's Mound (16PC5). Toth described the site as "one of the best preserved conical mounds left in the state of Louisiana (Toth 1988:206)." Furthermore, of

the 175 sherds that he surface collected in the cultivated fields around the site, Toth noted overwhelming ceramic evidence of early Marksville occupation at the site. Also, he placed the site in the Smithfield Phase of the Early Marksville and reported that all of the sites he assigned to this phase are associated with natural levees on the west bank of the Mississippi River (Toth 1988:196).

Jones and Shuman also mapped and investigated Monk's Mound (16PC5) which is located on the backside of the natural levee of the former course of the Mississippi River now known as Raccourci-Old River (Figure 23 and 24). This well preserved conical mound is approximately 15.1 feet in height and has a basal diameter of 130 feet. The mound was apparently originally reported by Haag, Neuman, Kniffen, and James B. Griffin in 1971, although local residents undoubtedly knew of its existence. Jones and Shuman found two sherds during a surface collection at the site, one of which was a Marksville Incised type, further validating the assignment of the mound to that cultural period.

In addition to the investigations, reports, and excavations carried out by archeologists with theoretical research aims or academic affiliations, archeological research has also been performed near the project area by archeologists under contract to the private sector or to governmental agencies such as the New Orleans District of the Army Corps of Engineers.

Among these researchers are R.W. Neuman and Frank Servello who conducted a survey of archeological sites in the Atchafalaya Basin (Neuman and Servello 1976). They, too, reported on Monk's Mound and the Bayou Lettsworth Mound, assigning a Marksville and Coles Creek cultural affiliation to the former and Coles Creek to the latter. Ceramics analysis was used to determine these affiliations, although the report does not specifically name the pottery types from each site that accounted for the designations. In 1977 Dr. J. Richard Shenkel conducted a cultural resources survey for the New Orleans District of the U.S. Army Corps of Engineers for a levee enlargement project from M-315 to 308.5-R. This area was wholly within Concordia Parish and portions of it were near the Above Old River segment of the current project. The proposed project essentially involved levee enlargement for a section between the Old River Control Structure and Lower Old River. No sites were then reported in the area and none were encountered by Shenkel during field work. While Shenkel noted previous archeological investigations in the region by James A. Ford, Jeffrey Brain and Alan Toth, he did not mention C. B. Moore's activities in the general area (Shenkel 1977:3).

New World Research Inc. under contract to EMANCO Inc. of Houston, Texas, conducted two cultural resources surveys in 1982 and 1983 along the proposed rights of way for pipelines near Raccourci Island in both Pointe Coupee and West Feliciana Parishes for a distance of 14 miles (23 km.). The 1982 work reported on five new sites that were all historic in their components. Sites 16PC41, 42, 43, and 44 were located between the levees of the Morganza Floodway and the southern bank of Raccourci Old River. 16PC40 is located just south of the northernmost levee of the Morganza Floodway (See Figure 19;

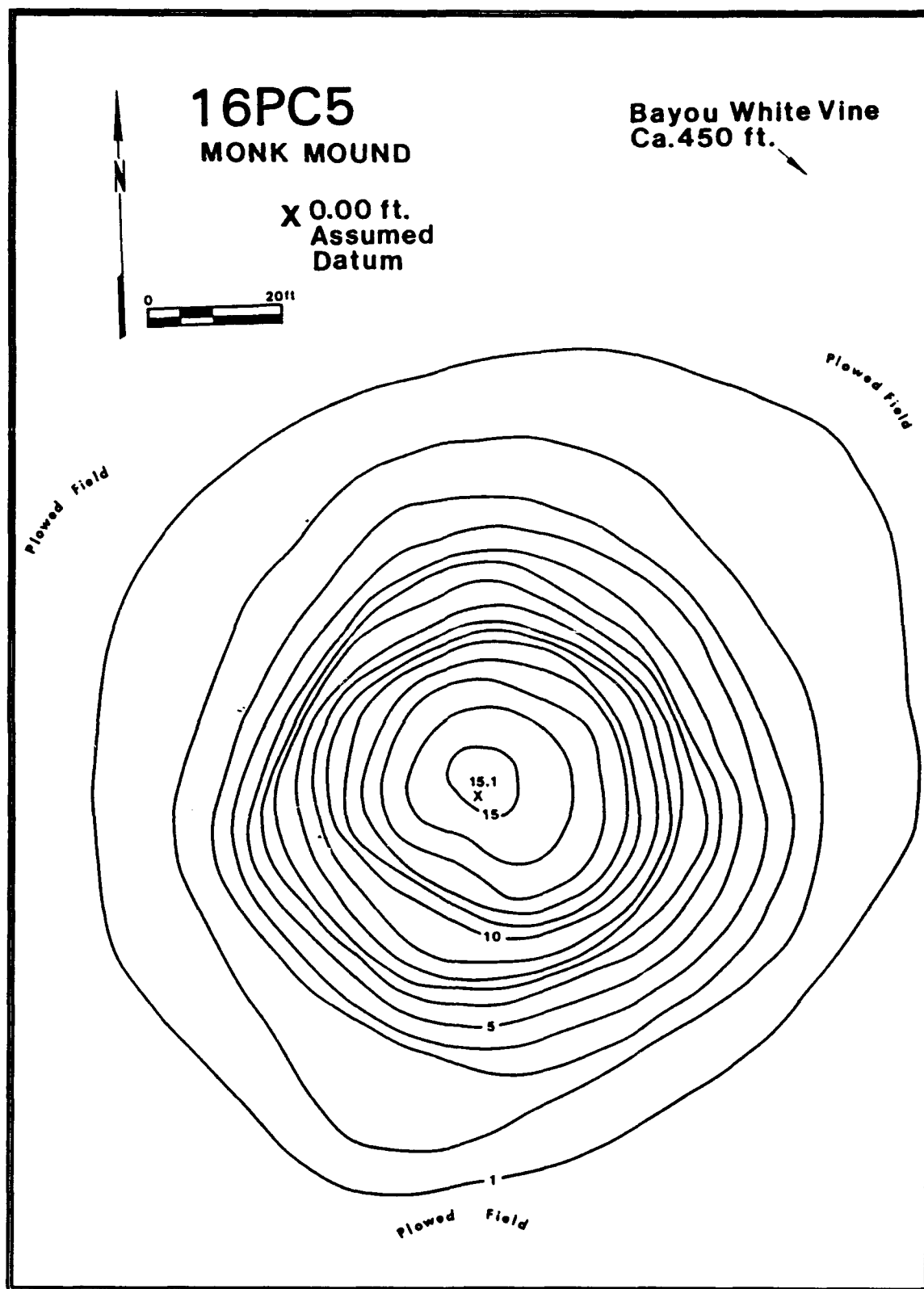


Figure 23: Contour map of Monk's Mound (16PC5). Source: Jones and Shuman 1987.

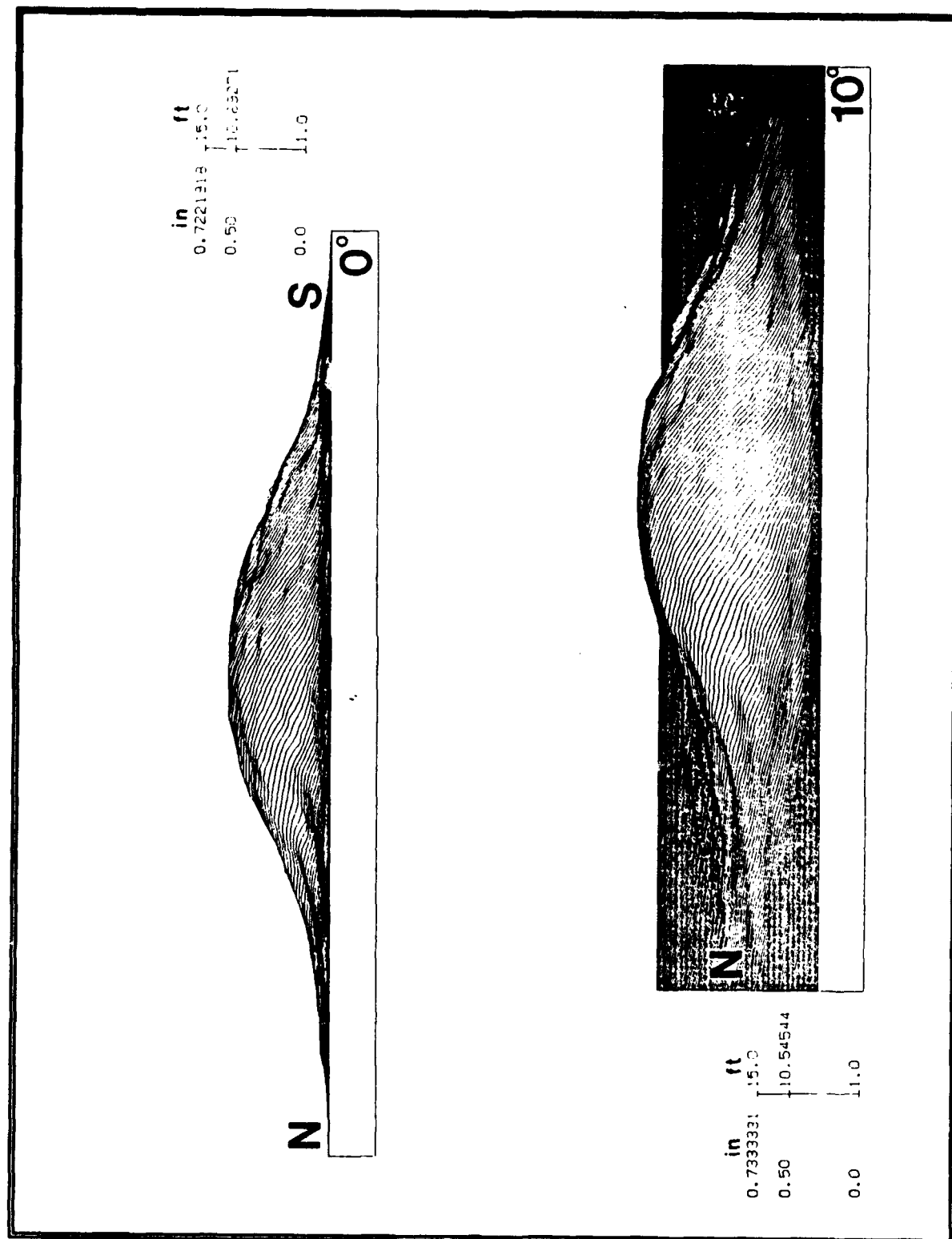


Figure 24: Computer graphic of Monk's Mound (16PC5). Source: Jones and Shuman 1987.

NWR 1982). This area is approximately six miles south of the Hog Point portion of the current proposed revetment work.

All these sites, except 16PC40, consisted of historic artifact scatters and had been disturbed by recent agricultural activity. 16PC40, because of its relative lack of disturbance was further tested for subsurface cultural deposits and eligibility for nomination to the National Register of Historic Places. Test units and artifact analysis revealed that while this site dated from the late-nineteenth and early-twentieth century, no house site could be located and the sites did not meet the criteria for nomination to the National Register (NWR 1982:50).

In 1983, New World Research conducted another survey for EMANCO, Inc. in the same region due to a realignment of the proposed oil pipeline. This realignment ran for 13.6 km west of Louisiana Highway 1 and the Texas and Pacific Railroad tracks between Lettsworth Bayou and south of Raccourci-Old River, just north of the levee of the Morganza Floodway. Six more historic sites were reported as a result of this survey. These sites, 16PC45, 46, 47, 48, 49, 50, 51, 52 and 53 were all scatters of historic debris and were judged to be former house sites since destroyed to allow cultivation. 16PC50 was found to be a dump site containing modern debris. None of the sites were deemed eligible for nomination to the National Register (NWR 1983). All of these sites are west and south of the current study area (See Figure 19).

The cultural resources survey that perhaps most pertinently applies to the current project area was conducted by the National Park Service in 1984 with Judy Shafer as the Principal Investigator. This survey, on the west bank of the Mississippi, included all portions of the current project area except the Above Old River portion. This survey also included areas where revetments have been recently built and are therefore excluded from the current project area. Although the width of the survey corridor paralleling the river is not mentioned in the report, the accompanying illustration suggests that it was comparable to the dimensions of the survey corridor for the current survey. According to the report, drainages and cut banks were closely inspected as these areas provided the greatest visibility (Shafer et al. 1984:23-25). No prehistoric or historic sites were encountered by the survey and little mention was made of geomorphology, culture history, or previous archeological investigation in the region around the survey area.

In 1988, Malcolm Shuman and Dennis Jones, working as private consultants, were contracted by the city of Vidalia, Louisiana to conduct a cultural resources survey for about 40 miles along the right of way of the transmission line from the Sidney A. Murray Hydroelectric Plant near the Old River Control Structure to the city of Vidalia. The Old River Control Structure and the power plant are approximately three miles north of the Above Old River segment of the current survey area. One historic cemetery, on Moriah Plantation, was encountered in the survey corridor and all the tombstones in it indicated mid twentieth century use. This paucity of observable sites, historic or prehistoric, was not unexpected due to the frequent historic inundation of the survey area and the fact that the

proposed course of the power line frequently ran through areas of backswamp (Shuman and Jones 1988).

Several sites that are on the National Register of Historic Places are located in the region of the project area (See Figure 19). All are along the Raccourci-Old River, the former channel of the Mississippi. One of these sites is St. Stephen's Episcopal Church and its attendant cemetery is located near the town of Innis. Founded in 1848, it continues to have an active congregation. The Lakeside Plantation Home which is occupied to this day, was also built in 1848. Both St. Stephen's and Lakeside were built by Mr. Charles Stewart who was one of the earliest settlers in this region. The bricks for St. Stephen's, in fact, were made at Lakeside by Stewart's slave labor. The Lacour Store in the present day community of Lacour is a plantation store that was built in 1870. It continued in operation until 1975 and was placed on the National Register in 1979. Apparently slated for reconstruction and preservation, the building is currently deteriorating rapidly. Also in the community of LaCour, the Old Hickory Plantation House was built in 1820 and is presently occupied. The house was originally built by the Zenon Ledoux family, but was eventually owned by Ovide Lacour who also built the store and for whom the community is named. Old Hickory was placed on the National Register in 1979.

CHAPTER VI

RESEARCH DESIGN AND FIELD METHODOLOGY

The execution of this project involved archival research, field work and artifact analysis. Each of these phases was a distinct operation during the project, but each phase influenced the execution of all the others during the project.

The purpose of this cultural resources survey is, of course, to locate the present or past existence of all prehistoric and historic sites in or near the project area described in the introduction. Another purpose is to determine the eligibility of any of these sites for inclusion in the National Register of Historic Places. A third purpose of the project is to make recommendations for the treatment of any sites encountered. A final aim is to address research themes in the area as identified by Louisiana's Comprehensive Archaeological Plan.

Determining Areas of High Probability

A check of the site files at the Louisiana Division of Archaeology and knowledge of past research indicated that archeological research in the region had been fairly intense, although very site specific. From C.B. Moore's visits to prehistoric mound sites, to Ford's work at Angola Prison across the river, to the discovery, analysis, litigation, and archeology of the Tunica Treasure, the region around the project area has received its fair share of attention. The proximity of several reported prehistoric and historic sites suggested high probability for undetected sites within the project area. In addition, several historic and prehistoric sites near the project area were visited to gain a better knowledge of the cultural resources in areas adjacent to the project and to update the site files of the Louisiana Division of Archaeology.

Portions of the Hog Point segment of the project area, for example, are directly across the river from known protohistoric and historic sites associated with the Tunica Indians. In the Carr Point segment, river landings were marked on maps, as were possible sites of historic occupation. Portions of the Hog Point segment were likewise seen to have a potential for historic sites given the recorded presence of a plantation, farms and a river landing. Historic maps also showed the Above Old River segment of the project area to be near a river landing. All such information helped to define high probability areas within the project area. Likewise map research showed which portions of the area had been the scenes of levee construction which would have so disturbed an area that locating sites would be unlikely.

Furthermore, it was quickly realized that the portion of the Mississippi River around the project area has been altered considerably by engineering projects that have influenced

the course of the Mississippi River and altered the scene from its appearance during prehistory and early historic times. For example, the Above Old River and Hog Point segments of the study area, now on the west bank of the river, were once portions of the floodplain on the east bank until the mid-nineteenth century. Understanding the nature and extent of these changes was absolutely necessary in order to complete the project. Consequently historic maps, current topographic quadrangles, and hydrographic maps of the appropriate portions of the Mississippi River were consulted in order to better understand the changes within the project area. Also, historic documents from the Louisiana Legislature relating to the Raccourci Cutoff were obtained and studied in order to understand the probabilities of finding sites in certain portions of the project area.

Because map research showed bank erosion to be the current primary geomorphological process in the project area, it was decided to examine the cut banks within the project area wherever such an examination could be safely carried out. It was assumed that because the area may have been occupied both historically and prehistorically, sites may have eroded out from the current top bank or artifacts could even be found *in situ*.

Field Methodology

The field methodology for conducting the cultural resources survey of the project area used procedures as described in the Scope of Services. This methodology consisted of an intensive pedestrian survey in conjunction with systematic shovel testing. The width between each survey transect was no more than 20 meters and the shovel tests were placed at 50 meter intervals. These intervals were observed whenever possible, although shovel tests were never placed in stream beds or drainage ditches. Thick vegetation also influenced the placement of shovel tests and the width of the survey transects between crew members. Levees and associated borrow pits were not tested, although their presence and condition was noted for the report. All fill from shovel tests, which were generally 30 cm in depth, was screened through 1/4 inch screen. When sites containing cultural resources were encountered, further shovel testing, augering, or test units were used to define and assess the cultural resource. All artifacts that were feasible for collection were gathered with a complete record of provenience, date, and site condition noted.

Artifact Analysis

The final phase of the project involved artifact description and analysis. All artifacts were washed, catalogued, and analyzed at the facilities of the Museum of Geoscience on the Baton Rouge campus of Louisiana State University. All artifacts, records, illustrations, and other data generated by this project will be curated by the Louisiana Division of Archaeology. The documents, studies, and procedures for analyzing the artifacts recovered during the project are presented in the discussions of the sites in Chapter VII.

The Louisiana Comprehensive Archaeological Plan has most of the study area in a division known as Management Unit V. This division includes 14 parishes in southeastern

Louisiana, with Pointe Coupee Parish being the northernmost parish. The area within Unit V is mostly water or wetland (83%) and the developments within the Lower Mississippi Valley have been dominant forces in forming the landscape that has in turn influenced cultural development. The preservation of known sites, as well as the conducting of further surveys to discover unknown sites, were regarded as a priority within this Management Unit. The research in the current project area was conducted with these priorities in mind.

CHAPTER VII

RESULTS OF THE SURVEY

Two historic sites were found directly within the survey area of the current project. These two sites are located, for the most part, below the current top bank of river. The observed rise and fall of the Mississippi in late November and early December, illustrated the cycle of alluviation-erosion that has impacted both sites for years. The site descriptions below will describe this situation in detail. In addition, two prehistoric sites near the study area, one of which is a mound site, were visited and reported to the Louisiana Division of Archaeology.

The Carr Point House Site (16PC23)

16PC23 was first detected as a brick scatter on the slope of the cut bank of the Mississippi River, a scatter revealed by record low levels of flow in the river. The site is located within the Carr Point Revetment item and is about 400 ft south, or downstream, from the current landing of the Angola Prison Ferry. It is about 150 ft south of a large ditch that has apparently been cut to allow for drainage of the borrow pit left by the construction of the primary levees that parallel Louisiana Highway 418 in the area. Figure 25, a detail of a portion of the Innis, La.-Miss. 7.5 ' Quadrangle, shows the location of this site within the current project area.

Further inspection of the site revealed a scatter of metal, nails, ceramics, and glass artifacts among and around the brick scatter. In addition, a group of bricks that were still joined by mortar were found. Figure 26 is a sketch map of the site and shows its placement in relation to the river and top bank. The site itself had little definition due to the past action of the Mississippi during high water. The dimensions of the site as of November 1988 were approximately 100 ft (30 m) north-south paralleling the river, by 90 ft (27 m) east-west, perpendicular to the current top bank. Large pieces of driftwood and uprooted trees cover much of the site.

A surface collection was conducted on the site on two occasions: November and December of 1988. Shovel tests were placed in the scatter of artifacts, but none were recovered by that method. Deposition of mud on the site from late November, early December alluviation of the site was especially pronounced in December. As a consequence, all artifacts have a surface provenience. This collection was rather extensive and includes almost all available material except bricks and large pieces of metal.

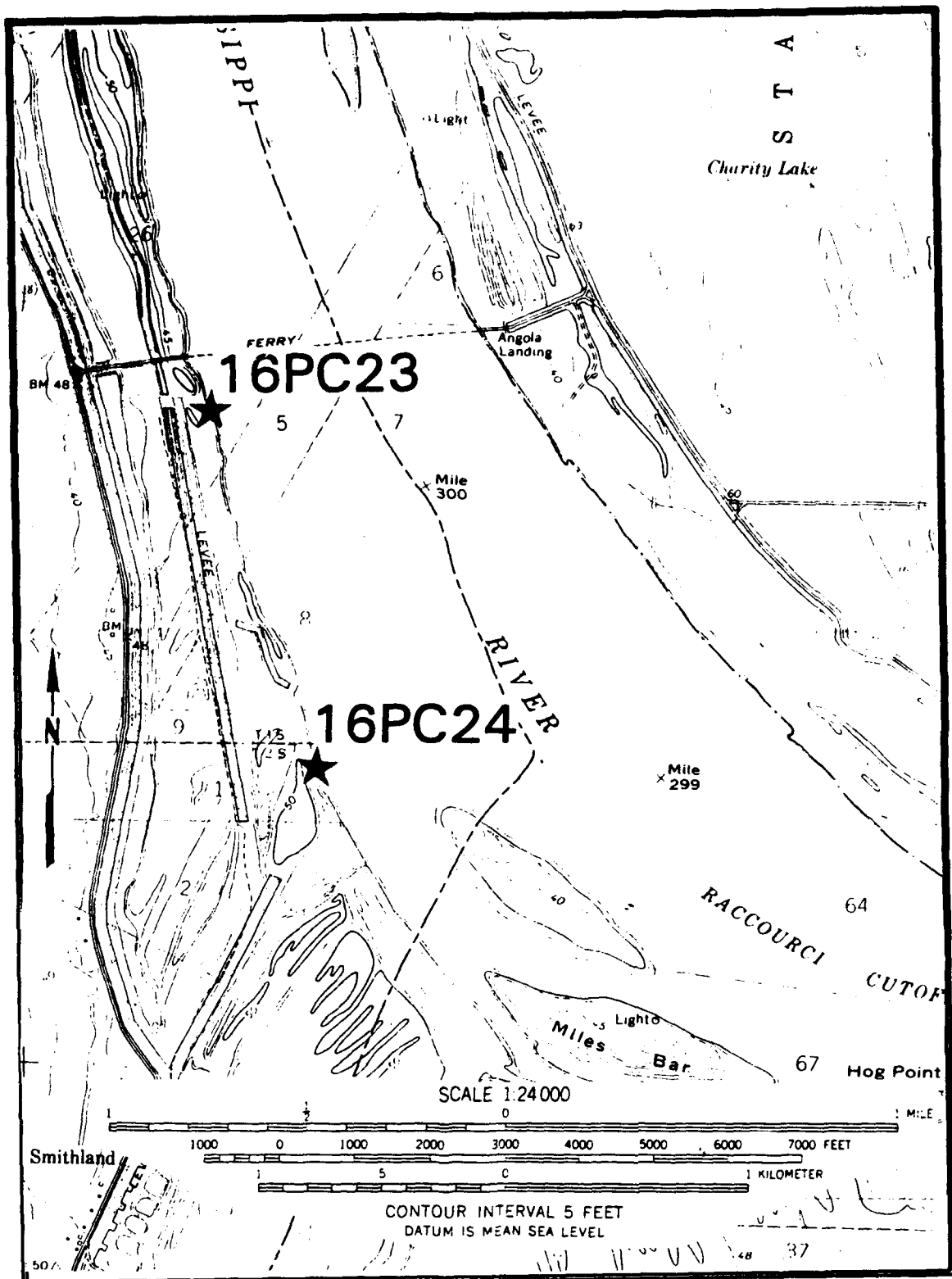


Figure 25: Detail of Innis, La. - Miss. 7.5' quadrangle showing locations of 16PC23 and 16PC24.

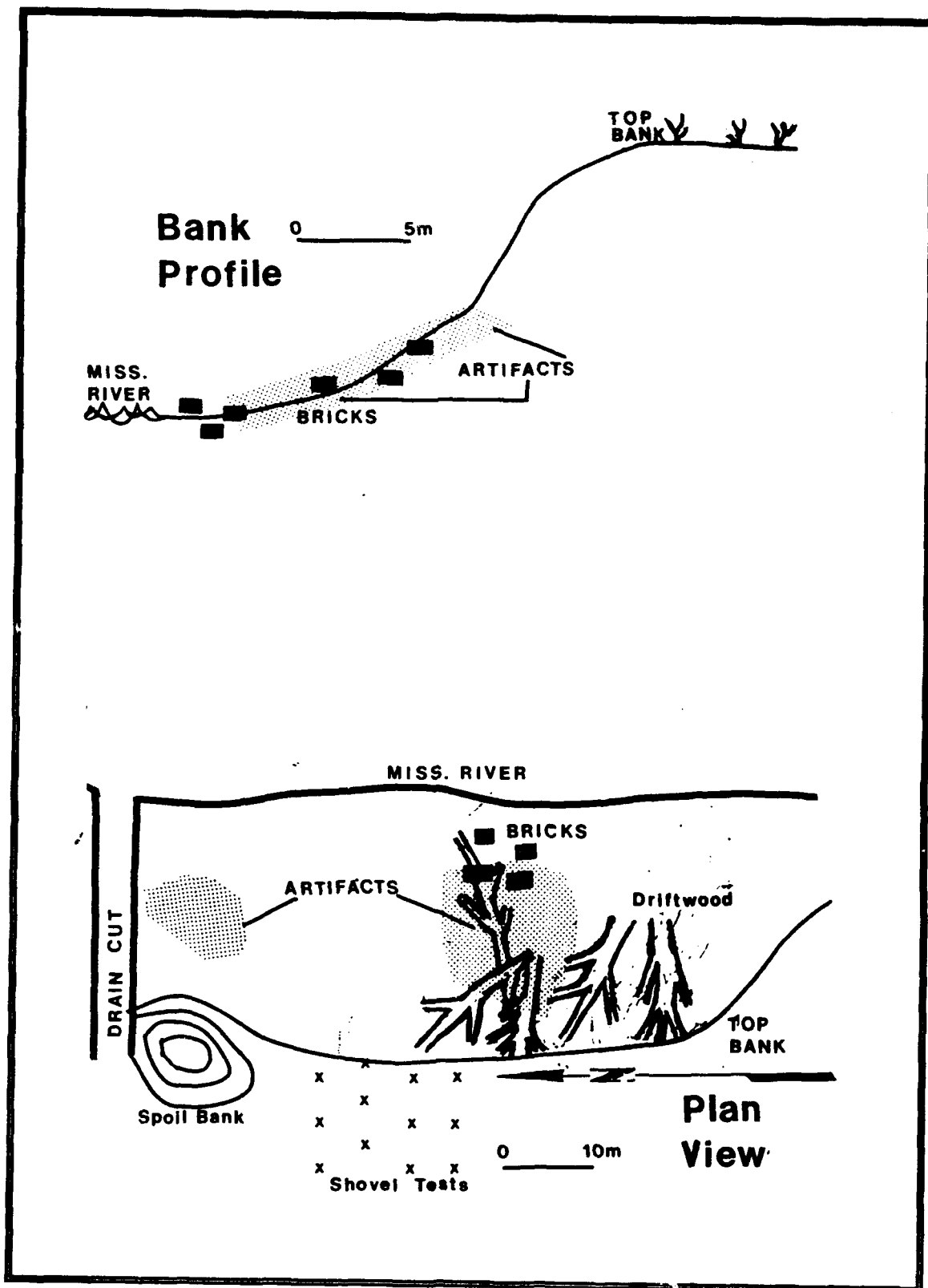


Figure 26: Sketch maps of Carr Point House site (16PC23).

The current top bank above the artifact scatter of the Carr Point House site is covered with sandy alluvium which is 5YR 4/4 on the Munsell Soil Color Chart. Also portions of the top bank of the site were impacted by spoil thrown on the bank during the construction of the drainage ditch from the borrow pit. This area was intensely shovel tested and the fill screened in an effort to locate *in situ* deposits of artifacts or evidence of structures. The pattern of shovel tests at the site are shown in Figure 26. These shovel tests did not produce any artifacts.

Conclusions regarding the site are that the bricks are the remnants of a chimney fall from a house that was probably wood frame. This fall was precipitated by the erosion of the bank upon which the house originally sat so that the bricks and other historical debris collapsed or were washed down slope. The rise and fall of the Mississippi River has undoubtedly washed away or covered much of the site. The possibility that this is a dump site seems unlikely as some of the items such as the bricks, especially those still joined by mortar, would have been reusable and reasonably difficult to transport to the site. Furthermore, while a road may once run to this site there is currently no sign of a road nearby. This mitigates against the site resulting from a more recent dumping of older material. Figures 27-30 are photographs of the site and some surface artifacts.

The material recovered from the site dates occupation of the structure from the late nineteenth to the early twentieth century. As to when the river may have actually taken the structure by erosion of the bank upon which it once sat, that has been impossible to determine. As discussed in Chapter 2, the erosion of the western bank in this portion of the study area has occurred at a significant rate.

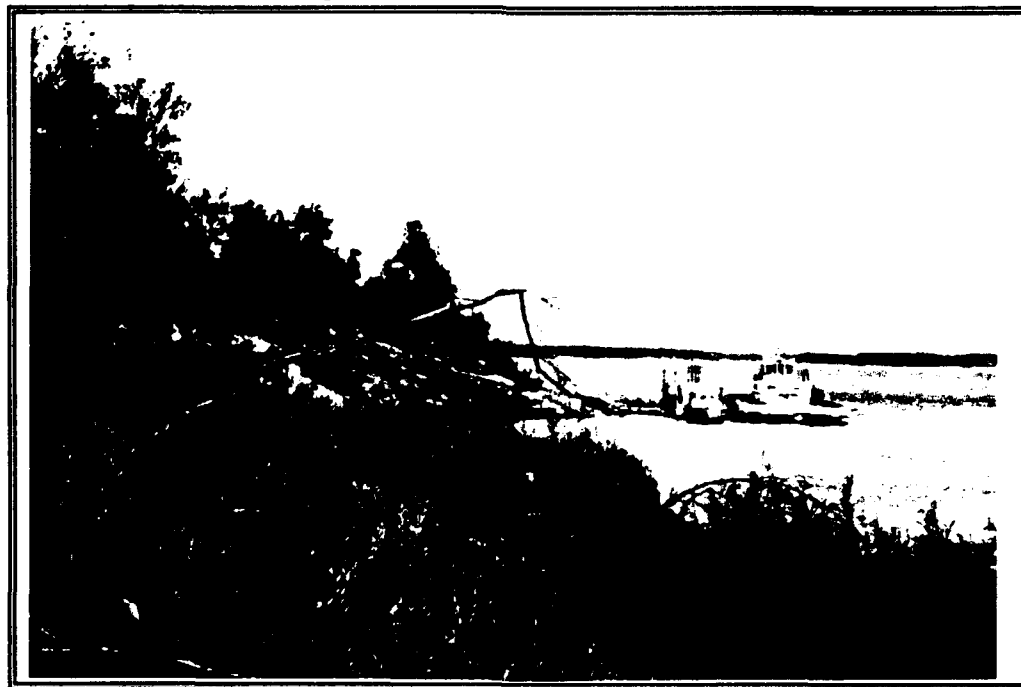


Figure 27: Photograph of Angola Prison Ferry from Carr Point House site (16PC23).



Figure 28: Portion of brick scatter found at Carr Point House site (16PC23).



Figure 29: Current top bank and driftwood cover over artifacts at Carr Point site (16PC23).



Figure 30: Shovel blade found on surface at Carr Point site (16PC23).

The Hog Point House Site (16PC24)

The Hog Point House site (16PC24), was initially discovered as a brick scatter while surveying the cut bank of the Mississippi River in the Hog Point segment of the project area (See Figure 25). The similarity to the Carr Point House site was immediately noticed. This site also appears to be a chimney fall from primarily wooden structure that once sat on or near the banks of the Mississippi River, but that has since been lost due to the erosion of the that bank.

Figure 31, a sketch map of the site also shows the relationship of the site to the river and shows its approximate dimensions. As might be expected, due to the action of the river, the site has little definition and appears to have been long impacted by the rise and fall of the Mississippi. The scatter of artifacts measures roughly 100 x 100 ft (30 x 30 m), although the pattern of the bricks when first observed in November of 1988 suggested pattern that reflected a chimney fall. They lay perpendicular to the bank as if the chimney has fallen toward the river. In December, when the site was visited for further testing, this pattern was no longer as discernible due to recent actions of the river.

In addition to the bricks, a large sample of ceramics, nails, glass, and metal were recovered at the site. Table II in Chapter VIII details the analysis of this collection. Shovel

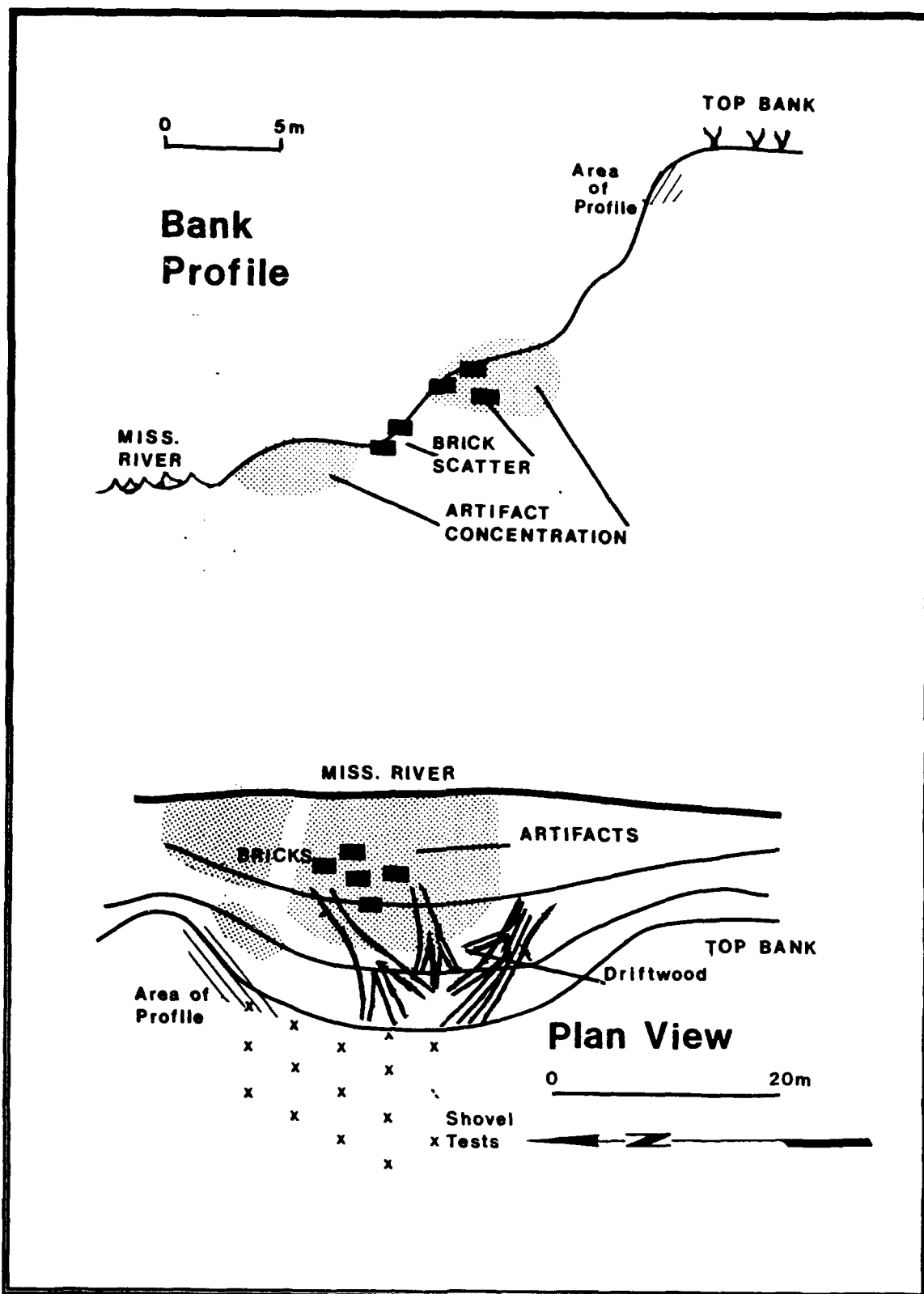


Figure 31: Sketch maps of Hog Point site (16PC24).

tests of the site itself, among the brick scatter, produced no artifacts. An exception to the surface provenience are those artifacts that were found *in situ* in a recently eroded portion of the cut bank above and slightly upstream (north) from the brick scatter. Table III, also in Chapter VIII, lists these artifacts. Figure 31 and 32 reveals the position of those artifacts in relation to the current top bank. It appears that at least four episodes of alluviation covered these artifacts. All the artifacts in this portion of the site were found at the same level and may reflect the original occupied surface at the site. Initially it was thought that these artifacts may reflect a historic midden area, but inspection, and scraping the cut bank in order to obtain a profile, seemed to indicate that the artifact concentration was not great enough to reflect a midden. Nevertheless, this discovery of *in situ* artifacts did show the extent of alluviation at the site and the probable depth of 1 m, required for productive testing on the current top bank near the site. Figure 33-36 are photographs of the Hog Point House site including views of the newly eroded portion of the top bank that revealed a profile and *in situ* artifacts.

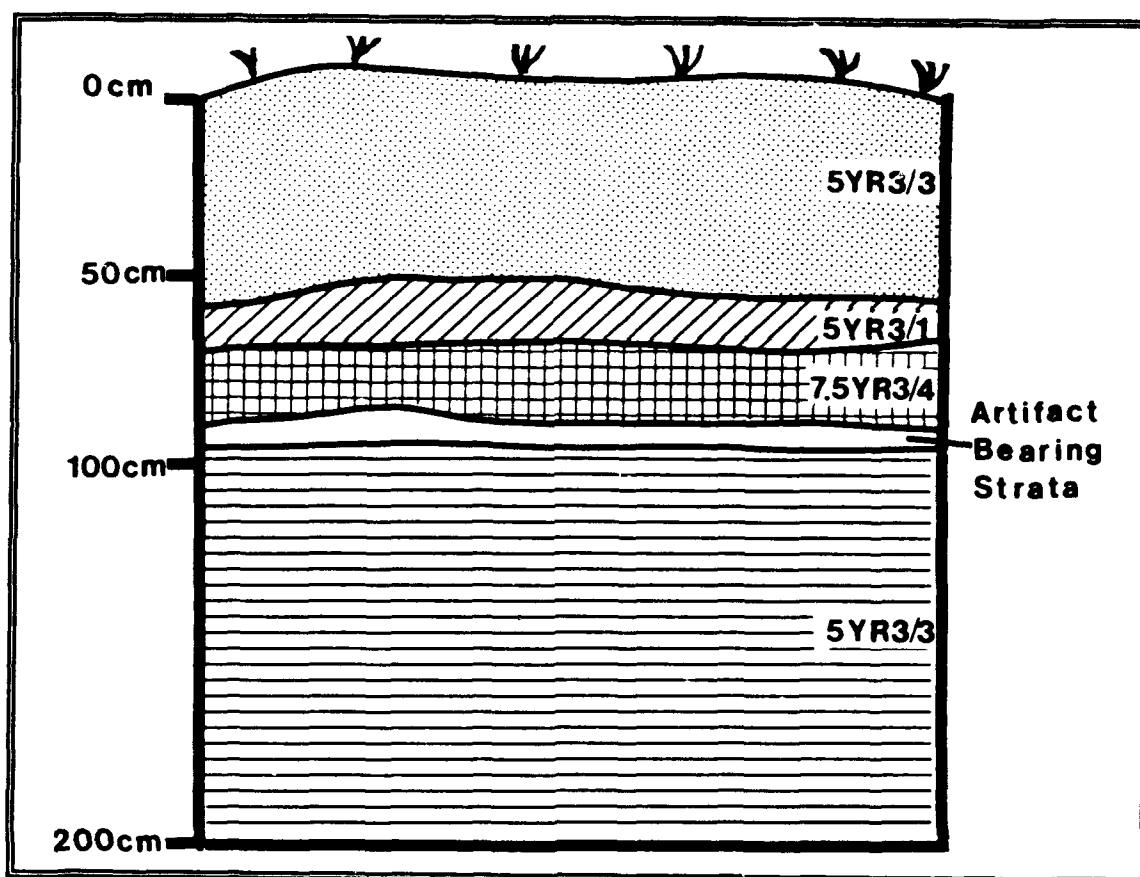


Figure 32: Profile of upper portion of cut bank with *in situ* artifacts at the Hog Point House site (16PC24).

Figure 33: Artifact scatter and cut bank at Hog Point House site (16PC24).



Figure 34: Brick scatter and bricks joined by mortar at the Hog Point site (16PC24).



Figure 35: *In situ* artifacts from eroding top bank at Hog Point House site (16PC24).



Figure 36: Profile of top bank of Hog Point House site (16PC24).

Despite the evidence of alluviation at the site, the top bank was shovel tested more intensely in the pattern indicated by Figure 31. These shovel tests recovered no artifacts associated with the site. Additionally, no indications of out buildings or fence posts or other such surface signs of a house site were found during this intensive survey of the top bank. Interestingly, however, it was noticed that a large pecan tree and two cedar trees, somewhat unusual natural vegetation for this area, were present on the cut bank very close to the edge. These trees may have been ornamental vegetation originally planted in association with the house site.

In addition, at approximately 200 ft downstream, or south of the Hog Point House site, a partially fallen fence line was encountered which may have been associated with the site. This barbed wire fence runs in a southwest-northeast line to the river and extends approximately 400 ft from the current top bank of the river as far as could be determined. Many of the fence posts were rotted or fallen and the barbed wire rusted. However, it was also observed that much of the vegetation associated with the fence line was composed of older trees running along or near the fence which may indicate that the vegetation may have also been allowed to grow up along the fence line.

History of Land Ownership for 16PC23 and 16PC24

Because of the lack of precise maps, it is difficult to determine the exact historic ownership of the land between Carr Point and Hog Point. However, it seems to have been part of the same tract up until the late nineteenth century. The earliest it can be traced back is to 1806 when a man named Lacour sold 450 American acres, located in Pointe Coupee Parish to Alexander Planche. This place was called "Anse," French for bay or cove, perhaps because it referred to a bend in the Mississippi (Conveyance Office Book [COB] entry 1326, Pointe Coupee Parish).

Three years later, on February 2, 1809, the property was sold to Sebastian Hirant (COB, entry 1326, Point Coupee Parish). Hirant held the property for 23 years. On September 30, 1834, he sold it to Adelaide Bourgiat, wife of James Fort Muse (COB entry 435, Pointe Coupee Parish). The property was then acquired three years later, on April 6, 1837, by the man who would lend his name to this plantation, William Dangerfield Smith (COB entry 1326, Pointe Coupee Parish). From this point on, this property was known as the Smithland Plantation.

William Dangerfield Smith, originally from Xenia, Ohio was born in 1818. He trained in medicine at the University of Edinburgh in Scotland, which provided one of the best medical educations in the world at that time. He travelled in Europe and the Holy Land after his education and eventually returned to the United States. He met and married a Julia Louisa Terrel in Natchez, Mississippi Julia's dowry included the land of the Smithland Plantation.

Smith had eleven children with his wife, developed a cotton plantation, and provided medical care for his neighbors and others into the 1870s. He was apparently a man of some note and education in the community and was widely respected. A perhaps apocryphal story about him is included in *Pointe Coupee Parish History* which claims that when Federal soldiers came to the plantation during the Civil War, they threatened to burn down Smith's house. Supposedly he showed the soldiers his wine cellar, allowed them to sample it, and endeared himself enough to his potentially hostile visitors that they decided not to burn down his house. Smith died, reportedly of yellow fever, in September of 1878 during an epidemic that also took his wife and a daughter (Wehrman in Riffel 1983:340-341).

While Smith and his wife are buried together at St. Stephens Episcopal Church and while Smith's biography in Riffel's history of Pointe Coupee Parish would seem to indicate a life-long attachment between husband and wife, the legal records of Pointe Coupee Parish indicate something else. On December 13, 1865, William Smith and Julia were separated. William was ordered to transfer to his wife "a tract of land or plantation, near the landing called Hog Point." This tract contained only 315 acres (COB entry 7355, Pointe Coupee Parish). William Smith retained a tract of 100 acres called the Mitchell tract which stood north of the original Smithland Plantation.

On June 17, 1878, William sold the Mitchell tract to Julia (COB entry 11489, Pointe Coupee Parish). The very same day, Julia sold 30 riverfront acres on the southern side of the plantation to her son, Archie. Included in this sale were the "buildings and improvements, and more importantly the right to keep a public landing for receiving and shipping freight on said land (COB entry 11492, Pointe Coupee Parish)." It is possible that this landing is near the land where the current landing for the Angola Ferry is located.

Julia and William Smith died, as noted above, in 1878 and their property fell equally to their ten children. Beginning on June 30, 1879, Archie Smith began buying out the shares of his brothers and sisters. In return for 500 dollars, Archie received one-tenth of the inheritance which included "cattle, mules, ploughs, farming utensils, house furniture (and) kitchen utensils (COB entries 11790, 11791, 11806, 12340, 12517)." In this manner, Archie Smith obtained seven-tenths of the inheritance left by his parents.

On February 27, 1882, the Smithland Plantation was divided into ten lots. John L. Kingsbury, who obtained a tenth share of Smithland from E.B. Smith, received Lot 1. Archie Smith retained lots 2-8, and siblings Catesby J. Smith and Mayborn J. Smith received lots 9 and 10 respectively (COB entry 12850, Pointe Coupee Parish). No map showing the placement and dimensions of these lots was available from the Clerk of Courts Office and the Pointe Coupee Parish Courthouse.

By 1885, Leonidas Harrell had purchased lots 9 and 10 from the Smiths (COB entry 2872, Pointe Coupee Parish). In 1888, Archie Smith bought Lot 1 from Kingsbury. Twelve years later, on May 1, 1900, Smith sold Lot 1, "laying (sic) between the levee and the river.... a portion of Hog Point" with all buildings and improvements, to Leonidas Hall for

\$4000 (COB entry 19393, Pointe Coupee Parish). It appears, then, that by the turn of the century Harrell owned most of what had once been Smithland Plantation. For whatever reasons, however, he sold lots 9 and 10 to a George W. Reagan for 88 dollars on March 6, 1901 (COB entry 19845, Pointe Coupee Parish). This seemingly low price may have been due to the erosion of the Mississippi River.

George Reagan died in 1917, and the history of the property became even further confused. On February 6, 1918, lot 10 was purchased from the succession of George Reagan by Vincent Feduccia. On October 25, 1930, this lot was inherited by Mary F. Feduccia, Vincent's widow (COB B, entry 1958, Pointe Coupee Parish). The record states that on March 29, 1919, Gideon Montfort, Sr. purchased "two tracts of land known as Smithland and Hog Point" from the Reagan succession (COB C entry 2872, Pointe Coupee Parish).

Charles Moncure Smith, Archie's son, inherited his portion of Smithland Plantation. Charles died and left his property to his wife, who in remarriage became Mrs. A. M. Morris. On June 20, 1932, Mrs. Morris sold lots 2-9 to Anthony Feduccia, for 575 dollars (COB H entry 2161, Pointe Coupee Parish). The following year, on December 21, 1933, Anthony sold this property to Mary Feduccia (COB I entry 2015, Pointe Coupee Parish). In turn, Mary sold it to her son Lawrence (COB 98 entry 51, Pointe Coupee Parish).

When Lawrence died, apparently sometime in the 1970s, the property was then divided among many heirs (COB III entry 126, Pointe Coupee Parish). Although it is unclear from the Clerk of Courts records as to who are the current owners of lots 1-10, into which the Smithland plantation was divided, the total land formerly encompassed by the Smithland Plantation is currently held by the Feduccia heirs and the Monforts.

As stated above, it would appear that the two house sites, 16PC23 and 16PC24, are associated with a turn-of-the-century occupations of the former Smithland Plantation. Because of the lack of maps showing the 10 lots of the former plantation, the sites could then be on property that could have been owned by Archie Smith, Leonidas Harrell or George Reagan, simply because their ownership corresponds to the dates suggested by the artifacts recovered. This ownership does not mean, of course, that the houses were lived in by these individuals. The plantation house that was associated with Dr. William D. Smith was reportedly taken by the Mississippi, although exactly when is unknown.

Newly Reported Prehistoric Sites near Project Area

In addition to the historic sites located directly within the survey area, two previously unreported prehistoric sites near the project area were shown to Jones and Shuman by an informant who had originally contacted them in regard to an unrelated research project in nearby Avoyelles Parish. These sites are of no small consequence to furthering our understanding of prehistoric occupation in the area around the Old River Control Structure.

The Prairie Lake Mound (16CO28)

Figure 37 shows the approximate location of the Prairie Lake Mound site which is located on land that is part of the Three Rivers Wildlife and Fisheries Management Area. 16CO28 is approximately 1.4 mi due north of the Above Old River segment of the project area. This mound measures approximately 38 m north-south by 32 m east-west and is currently 1.3 m high from the discernible base to the summit. The current shape of the mound, which has apparently undergone considerable alluviation and erosion, suggests a pyramidal platform mound. The summit's dimensions are approximately 18 m on a north-south axis by 15 m on an east-west axis.

The area around the mound is very level with no nearby relief over 20 cm. The area is in what appears to be a forest with trees no older than 50-60 years in age. No large oaks or other trees have taken root on the mound to take advantage of the increased drainage as is often the case in low lying areas of the state. Underbrush is non-existent on the mound and very slight in the immediate area around the mound.

Initially, when the mound was reported by an informant very familiar with the area, there was no evidence of pot hunting activities or vandalism. A slight depression was noted on the eastern flank of the mound, but its appearance suggested that it was the result of a tree fall, rather than potting. Also during the first visit to the site and a subsequent visit to make a contour map of the mound (Figure 38), several plain sherds of aboriginal pottery were recovered from the surface of the mound on its summit and flanks. None of the sherds show any diagnostic markings, but the temper and manufacture suggest Baytown Plain. Table IV shows an analysis of artifacts recovered from this site. No artifacts were found on the surface in the area surrounding the mound. In addition to a contour map, a computer graphic of the mound was composed (Figure 39) which gives a more discernible view of the mound's current morphology than the contour map or photographs (Figures 40 & 41).

In addition, to surface collection, shovel tests were placed at five meter intervals from the base of the mound radiating in the cardinal directions. These tests were an attempt to recover more artifacts and also to verify the appearance of alluviation around the mound. The tests were conducted to a depth of approximately 30 cm. No artifacts were recovered and it was quickly evident that the site had indeed been frequently flooded. The soils were very thick, dark clays and showed a classification of 5YR 3/1 on the Munsell Color Chart. It would seem, therefore, that cultural deposits associated with the mound lie at an as yet undetermined depth below the current surface.

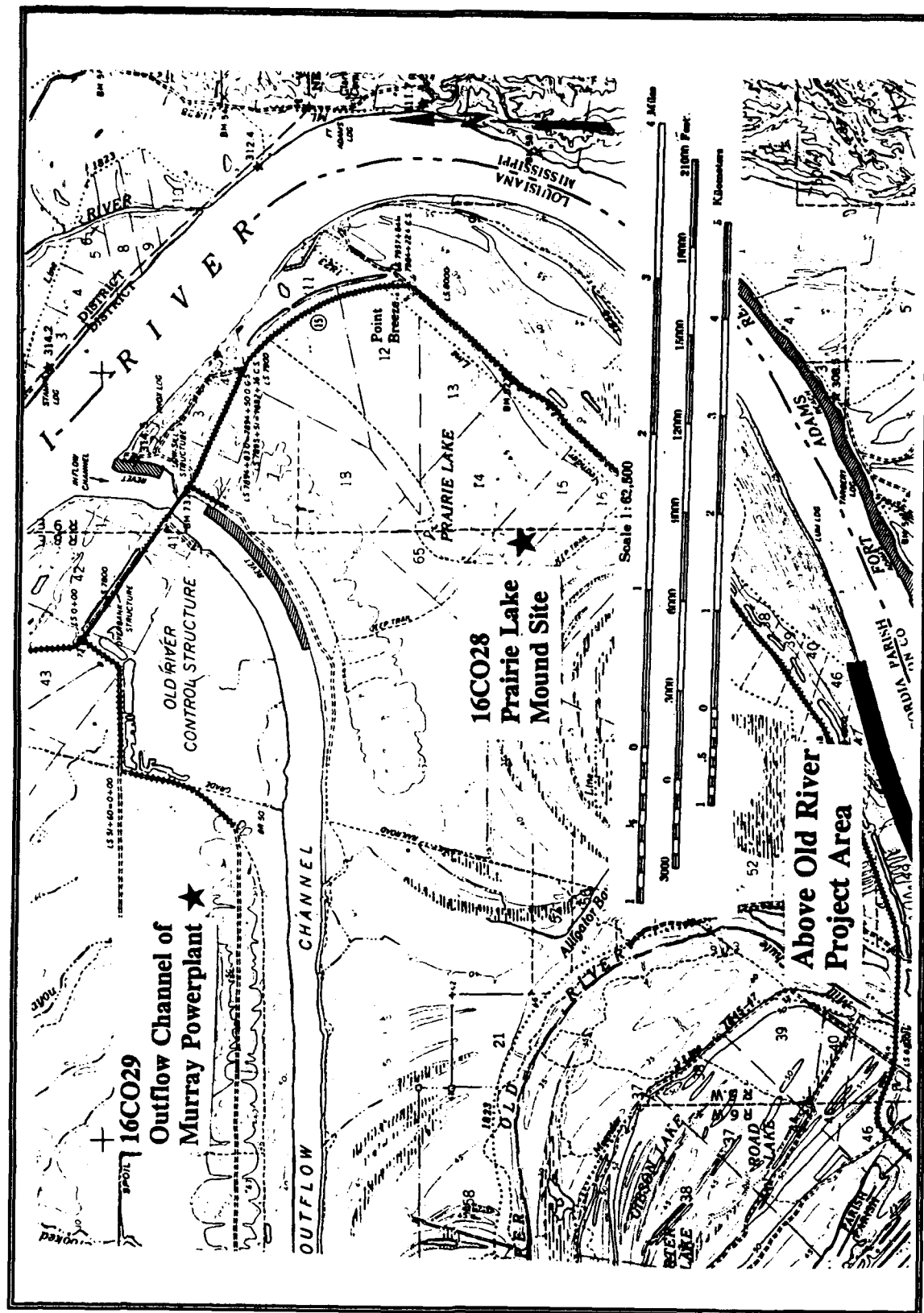


Figure 37: Detail of Artonish Miss-La. 15' quadrangle showing locations of 16CO28 and 16CO29.

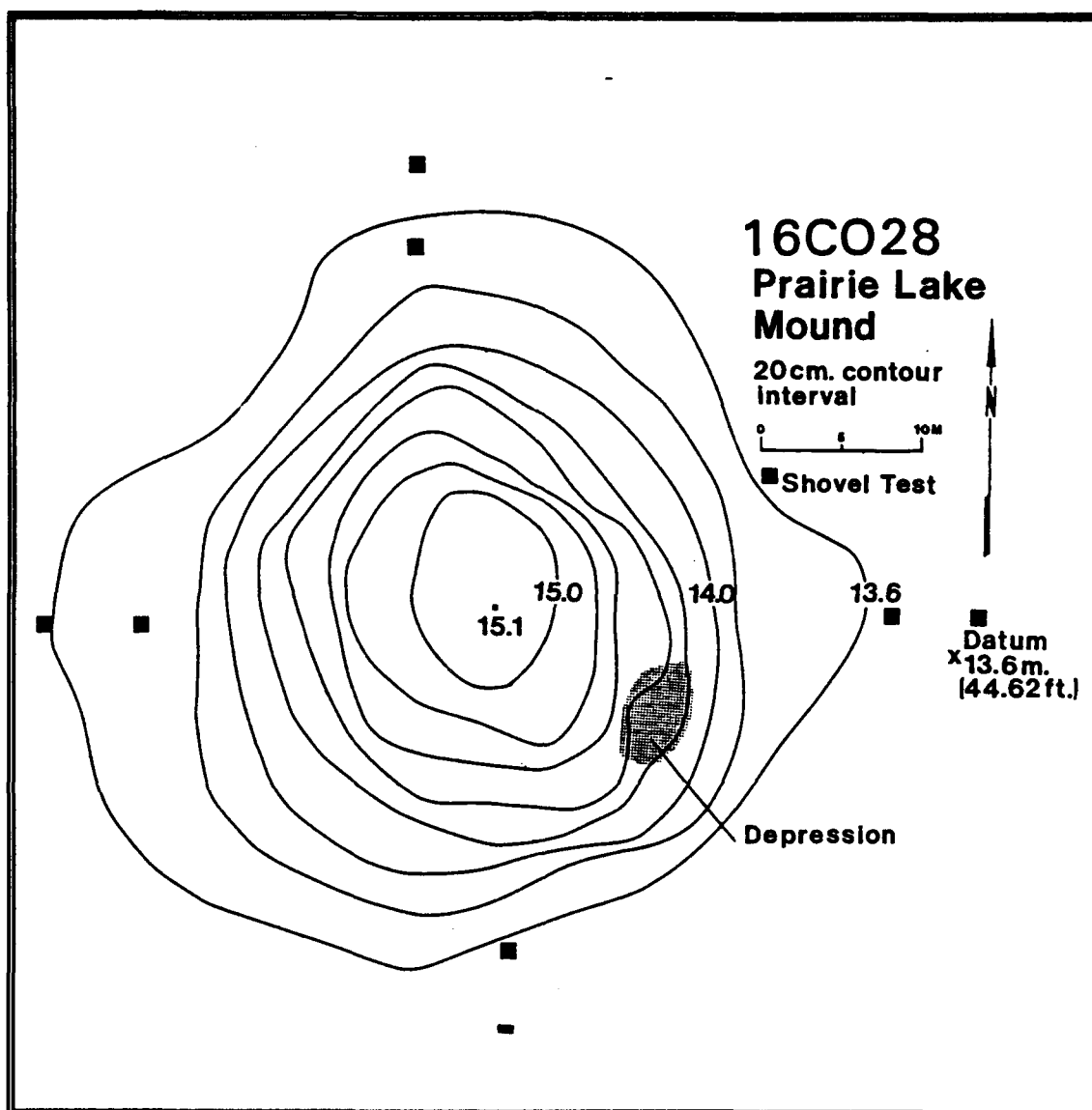


Figure 38: Contour map of Prairie Lake Mound (16CO28).

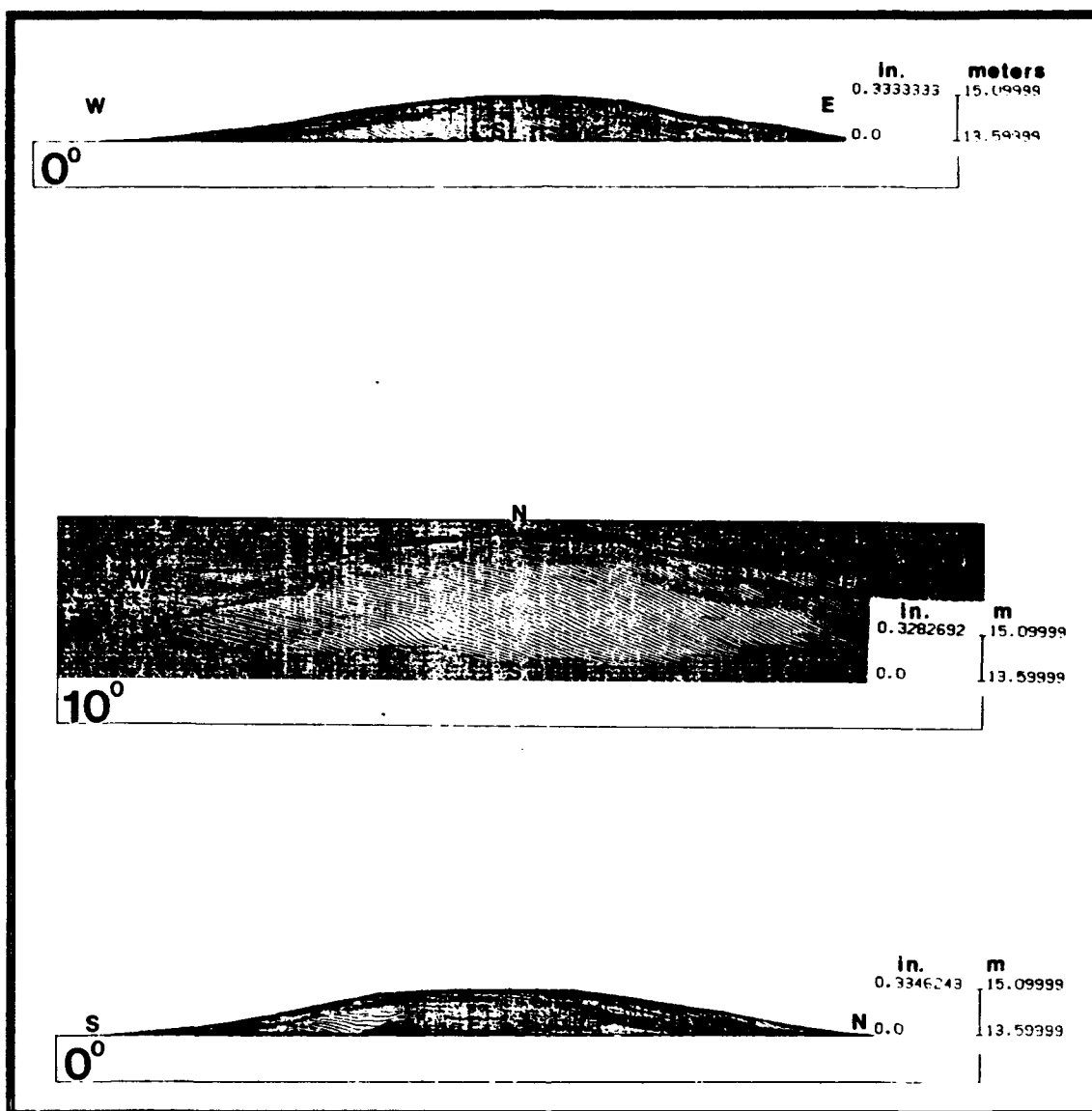


Figure 39: Computer graphic of the Prairie Lake Mound (16CO28).



Figure 40: Photograph of Prairie Lake Mound (16CO28). Mound's slope is highlighted. Direction: facing west.



Figure 41: Photograph of Prairie Lake Mound (16CO28). Mound's slope is highlighted. Direction: facing south.

The original contour map of the mound at 16CO28 was not tied into a known elevation. Upon request from the Technical Representative from the Army Corps of Engineers, New Orleans District, an elevation line from a known benchmark approximately 2.5 mi away was run to the site. The benchmark elevation, 13.6 m (44.62 ft) fits very well with elevations as shown on the Fort Adams Miss.-La. 7.5' quadrangle.

When this elevation line was run to the site, in December of 1988, it was discovered that the summit of the mound had recently been vandalized. A shallow hole, approximately eight inches deep and 12 in across, had been dug, no doubt in search of artifacts. Instead, this potting expedition turned up evidence of human burial at a very shallow depth. Pieces of cranium and molar were lying on the backfill of the pothole. These remains were in very fragile condition and their patina suggest long term burial. No artifacts were found in the backfill in association with the skeletal remains. For whatever reasons, the vandal apparently stopped his efforts when bones and teeth appeared in his shovel. Because this mound lies on state property, Dr. Kathleen Byrd was made aware of this recent vandalism and she in turn notified the Louisiana Department of Wildlife and Fisheries so that they might make occasional visits to the area to discourage future vandalism. As of January, 1989, the mound had not been further vandalized.

In the course of archival investigation for this report, it was noted that C.B. Moore reported a mound site at Glendale Landing, Concordia Parish Louisiana in 1911. No such site designation was found in the site files of the Louisiana Division of Archaeology, nor is Glendale Landing marked on recent USGS maps that include Concordia Parish. Lum Landing, however, is located approximately 1.4 mi south of the Prairie Lake Mound and within the Above Old River portion of the project area.

The original 15' quadrangle for the area, however, published in 1939 and on file in the Cartography Library at Louisiana State University, shows a designation of a Glendale Plantation in the same area now designated as Point Breeze near Lum Plantation. It appeared, therefore, that either the portion of the area on the west bank of the Mississippi River between the Old River Control Structure and the Lower Channel of Old River had two mound sites (the Prairie Lake Mound and the Glendale Landing Mound reported by Moore) or that the two mounds were the same site.

The Prairie Lake Mound is currently owned by the Louisiana Department of Wildlife and Fisheries, but a check at the Clerk of Court Office for Concordia Parish in Vidalia, Louisiana showed that the State had obtained it from the heirs of Mr. J.M. Davis. This Mr. Davis is the same land owner mentioned by Moore in his 1911 report. Furthermore, the land sold to Wildlife and Fisheries was mentioned as part of the Glendale Plantation. Further similarities such as mound dimensions, distance, and direction from the Mississippi River indicate that the Prairie Lake Mound and C.B. Moore's Glendale Landing Mound are the same site.

As a consequence of C.B. Moore's investigation of the Glendale Landing or Prairie Lake Mound, 15 burials were detected and described (Chapter V). In addition, with the human remains recovered from backfill of the pothole, we now have additional data regarding the burial practices of those who inhabited the site. Unfortunately, the remains Moore took from the mound have not been relocated for more detailed analysis (Mannheim 1985; Mannheim personal communication 1989). We do know from the remains found associated with the pothole that burials continue to be found at a very shallow depth below the surface, as was the case when Moore dug the mound.

Some of the human remains revealed by the pothole were fractured and showed the signs of disturbance caused by their careless exhumation. The bones collected from the surface of the backfill consisted of seven cranial fragments, mostly from the parietal region; five teeth; two vertebral fragments; one small fragment of rib; and three long bone fragments. In addition 38 bone fragments that were unidentifiable were also recovered.

The inventory of the remains analyzed from the Prairie Lake Mound represent a minimum of one individual, with the possibility of a second. Of the teeth present, three molars and one premolar are probably from the same individual, while a fourth molar may be from another person. The three molars have moderate wear and represent an adult 25 years or older. Two of the molars have small pit caries. The fourth molar may be from a younger individual, perhaps around 16 years of age. This tooth shows no wear. The remainder of the sample is too fragmentary to determine any additional pathologies or to assess the sex of the individual(s) that were disinterred from 16CO28.

The remains at the Prairie Lake Mound compare very favorably with the burial patterns at the nearby Lettsworth Bayou Mound (16PC7) which, as previously noted, was also dug by C.B. Moore. In fact both mound sites located near the project area reflect the burial patterns of the Coles Creek period as revealed by excavations at the Greenhouse Site (16AV2) the most thoroughly investigated site of the Coles Creek period in Louisiana (Neuman 1984). At Greenhouse burials were found in three mounds and showed that the interments had not been accompanied by burial furniture and gave the overall impression that there was a lack of method in the burials (Ford 1951:106). More recent work at the site (Jones and Shuman 1989) revealed that human remains in one of the remaining mounds at the Greenhouse site are to be found at a very shallow depth below the current surface. Vandal's excavation on the summit of Mound G at the Greenhouse site brought evidence of multiple burials to the surface.

The Murray Outflow Channel Midden (16CO29)

The same informant that reported the Prairie Lake Mound also made known what appears to be a prehistoric midden site near the recently constructed outflow channel of the Sidney A. Murray Hydroelectric Plant near the Old River Control Structure. This area has been greatly impacted by construction of the outflow channel and previous construction of levees and revetments for the control structure (See Figure 37).

Currently, the site consists of ceramic sherds eroding out of the exposed profile of earth above the revetment for the banks of the outflow channel and about one meter below the current top surface of a road that runs along the south bank of the outflow channel. The midden appears for a distance of about 20-25 m in the eroding bank above the channel and all the artifacts are located at about the same level, although some may have been moved by the effects of erosion. The artifacts recovered from the site consisted mostly of ceramic sherds. Varieties such as Marksville Incised, *var. Yokena*; Evansville Punctated, *var. Sharkey*; and Marksville Incised, *var. Troyville*, indicate a Troyville period occupation of the site with a possible transition from the earlier Marksville period (following chapter).

While what may be lithic debris was also collected from the site, no discernible stone tools or projectile points were recovered. It should be noted here that the artifacts from the site are surrounded by stone and gravel from the road above the midden's level. Therefore, its entirely possible that some of the lithics identified as debitage because of what appear to be conchoidal fractures, may instead be much more recent deposits due to road construction or vehicles on that road. Furthermore, because the area has been the scene of recent extensive construction activity, it is unclear whether or not the artifacts that are eroding out at the site are from an *in situ* midden or from a recently deposited spoil bank. Excavation in the area of the midden would be necessary to determine this. Nevertheless, the presence of artifacts in this area confirms that there was indeed a significant prehistoric occupation in the flood plain region around the Old River Control Structure and in the general region of the confluence of the Red, Atchafalaya, and Mississippi Rivers.

CHAPTER VIII

ARTIFACT ANALYSIS

Methodology for Historic Artifact Analysis

All artifacts were washed, sorted, and catalogued according to standards of the Louisiana Division of Archaeology. Artifacts consisting of ceramics, glass, and nails were described using formal archeological classifications presented below. Other categories of artifacts are identified and described for each site.

Ceramics. A paradigmatic classification (Dunnell 1971:84) which is the product of the combination of unweighted classes of paste, glaze, and of decorative type (Yakubik 1980) was utilized to describe historic Euro-American ceramics. The advantage to this method is that it provides a more complete and flexible definition of these ceramics by its ability to handle ambiguous and transitional ceramic types. This ultimately makes for tighter chronological control. Because decorative type is treated as an equal class relative to paste and glaze, it permits the examination of socio-economic issues concerning ceramic use (Worthy 1982; Miller 1980). This classificatory framework has proven useful during previous research at both eighteenth and nineteenth century sites in rural and urban settings.

White colored earthenware was the result of the introduction of increasing amounts of cobalt into the cream colored earthen ware paste developed by Josian Wedgwood and Thomas Whieldon in 1759. This development occurred during the early nineteenth century. A similar ware, referred to as ironstone, stone china, and granite ware was popularized during the mid-nineteenth century in America and England. This type also had a refined white colored earthenware paste.

It should be noted that Worthy (1982) states that whitewares are easily distinguished from later ironstones. Unfortunately, distinctions between the two types by the middle of the nineteenth century is not clear. While it seems that sufficient differences exist between whiteware and ironstone in terms of paste composition, permeability, body thickness, decorations, and surface color to justify their segregation, it is equally clear that these differences form a continuum between the two types, just as pearlware gradually grades into whiteware. Barber (1902:19) states that the formula for ironstone is similar to that used in all white ceramic wares, namely flint, feldspar, kaolin, and ball clay. For the purposes of this report, the classification unit of "whiteware/ironstone" is for used intermediate/indeterminate sherds.

As noted, ironstone was developed in England about 1850 and was produced in the United States at a slightly later date (Ramsey 1947:153). It has a hard white, and often thick and heavy ceramic body. Although not completely vitrified, it is more vitrified than

whiteware. Ironstone fractures evenly and smoothly. It is frequently undecorated, or decorated with only molded relief, although transfer printing is not uncommon, particularly in the late nineteenth and early twentieth century. Decorative patterns usually consisting of floral patterns and decalcomania is also common after about 1900. Ironstone, like whiteware, was manufactured into the early twentieth century.

Yellow colored earthenware is an American coarse utilitarian body type. The paste in fact consists of stoneware, not earthen clays, but the ware is classified as an earthenware because it is not fired to vitrification. The paste color is buff to brownish yellow and varies with the amounts and types of impurities in the clays and with the firing temperature. The variety called yellowware is covered with a clear alkaline glaze. It was molded into a variety of forms such as bowls, jelly molds, pitchers, and mugs. After 1840, it is frequently found with annular bands in white, brown, and blue, as well as mocha decoration in blue or brown (Ramsey 1947:148-150). Yellowware was produced into the twentieth century.

Stoneware has a paste that ranges in color from white-gray or buff to deep gray and brown. Stoneware is fired at between 1200-1300 degrees, and it has a smooth and stony appearance (Rhodes 1973:22). Stoneware was first commercially produced in the United States around 1775. Use of these heavy, wheel thrown utilitarian vessels became widespread during the nineteenth century.

The most common surface treatment of stoneware is salt glazing. The raw ceramic is fired until the clay matures, at which point salt is added to the firebox. The vaporized salt is then deposited on the ware, producing a thin, bright, hard glaze with an orange-peel texture (Rhodes 1973:285). Because the salt vapor usually does not adequately penetrate the interior of the vessels, an Albany slip developed around 1810. This slip usually coats the interior of American stonewares. Salt glaze stoneware is often undecorated, or decorated with cobalt hand-painting.

Hard paste porcelain was first manufactured by the Chinese in the eighth century A.D. (T'ang Dynasty). Chinese porcelain came into such demand that by the eighteenth century Oriental potters were manufacturing porcelain exclusively for export. Underglaze blue hand-painted porcelain was first available in the American colonies during the second half of the seventeenth century. In the early nineteenth century, the quality of the hand-painting declined dramatically. By the later nineteenth century, inexpensive porcelains were being mass produced for the American market by manufacturers such as Haviland and Company. Undecorated French porcelains provided competition for American and British ironstones during this period. Commercially successful hard paste porcelains were not manufactured in the United State until around 1880. The surface appearance of porcelain is hard and smooth, and surface color ranges from very white to white with a gray, blue, or green cast (Miller and Stone 1970:81; Noel Hume 1970:257-263). Porcelain can receive a variety of surface treatments, although only cobalt decoration may be applied under the glaze due to the heat necessary to fire the ceramic. Hand-painting, transfer printing, and decalcomania are all common on porcelain.

Glass. Prior to the nineteenth century, the majority of glassware was handblown. Characteristics of hand-blown glass include the absence of mold seams and an asymmetrical vessel shape. Also, bottles were blown into a one piece dip-mold to form the vessel body, while the neck and shoulders were hand finished. This technique came into use during the later 18th century and continued to the mid-nineteenth century.

A variety of molds for bottle manufacture occurred during the nineteenth century. Bottle molds to shape the shoulders and the necks of vessels as well as the body came into use during the first two decades of the nineteenth century. Two piece molds began to replace three piece molds by the mid 1840s, and by the following decade the two piece mold was further improved by the addition of cup bottoms and post bottoms to form the base (Haskell 1981:62; Lorraine 1968:40). Also, during the eighteenth and nineteenth centuries, bottle lips were cut off with shears while the glass was still soft. These sheared lips are characterized by an abraded plain cylindrical top.

The production of pharmaceutical bottles increased significantly following the Civil War. New shapes included the panelled flask and the French square. Embossing, accomplished by the insertion of a slug plate into a standardized mold, also became popular. In addition, the turn mold was introduced around 1870. In this process, the bottle was turned within a paste coated mold. The vertical seams were obliterated by this process, but horizontal striations are left on the bottle.

Michael Owens patented a fully automatic bottle machine in 1903. This eliminated all hand labor from bottle manufacture. By the third decade of the twentieth century, the vast majority of bottles were produced by this method.

In addition to dates provided by manufacturing techniques, certain glass colors also provide chronological information. "Opaque black" glass, for example, is characteristic of bottles, especially liquor bottles, throughout the eighteenth century and into the late nineteenth century. Also, most clear glass prior to the Civil War was lead crystal. With the introduction of improved lime glass in 1864, an inexpensive alternative was available. Consequently, clear glass is more common from the second half of the nineteenth century onward. Finally, manganese oxide came into wider use as a decolorizing agent in the final third of the nineteenth century and continued through World War I.

Nails. Generally, nails are only broadly datable. Prior to 1790, all nails were hand wrought. A variety of nail head shapes define different types.

Between 1790 and the 1830s, early machine cut square nails came into general use. Machine cut square nails with wrought heads were manufactured between about 1790 and 1815, after which square cut nails with machine made heads appeared. Additional nail attributes that can provide chronological information include cut marks and the direction of the metal fibers in the nail shaft. After this date, the burrs appear on adjacent nail corners. In addition, the metal fibers of a nail ran horizontally to the shaft prior to about 1830, later

they ran vertically. Wire nails were introduced around 1850 and they began to replace square cut nails by the third quarter of the nineteenth century (Nelson 1963; Noel Hume 1970:252-254). Frequently, however, classification of nails is hampered by extreme corrosion.

Artifact Analysis for 16PC23 and 16PC24

The Carr Point House Site (16PC23)

Fifty-seven ceramic artifacts were recovered from the Carr Point historical site (Table II). Of these, over 82% (47 sherds) were ironstone. Only one of these, a plate rim, was transfer-printed with blue-green floral decoration. The remainder of the sherds were undecorated, or had simple molded relief patterns as was typical of mid to late nineteenth century ironstone. The majority of ironstone sherds identifiable as to former function were plates (11 sherds); cups (6 sherds); and saucers (3 sherds).

Other ceramic tableware included whiteware/ironstone (3 sherds), English majolica (3 sherds) and porcelain (3 sherds). The latter were the inexpensive porcelain types common in the late nineteenth century. The only utilitarian ceramic sherd recovered was single fragment of a brown salt glazed stoneware vessel.

A Mean Ceramic Date was not calculated for the ceramic collection. The preponderance of ironstone, none of which exhibited makers' marks, would have skewed any resultant date. The ceramics, however, generally suggest a late nineteenth century/early twentieth century date for the site. The absence of true whiteware and the presence of only a few sherds of transitional white ware/ironstone strongly indicates that the site postdates 1850, and probably postdates the Civil War.

The majority of the 48 glass sherds recovered were not diagnostic in terms of manufacturing technique. However, 46% were amethyst (15 sherds) or clear (7 sherds), suggesting a late nineteenth century/early twentieth century date for the assemblage. Similarly, most of the manufacturing attributes exhibited by the assemblage (turn molding, two piece molding, tooled lips, paneled flask shape) indicate a late nineteenth/early twentieth century date. It should be noted that in addition to bottle glass, pressed glass table ware (4 sherds) and pane glass (5 sherds) were collected.

Architectural remains such as square and wire nails, spikes, a brass key hole plate, and a door hinge were recovered. Four mortar fragments were found, as well as two brick fragments. One of the latter is a small fragment of soft, light red (5YR 6/6) brick. The other is a soft, red (2.5YR 5/6) brick fragment measuring 3.875" wide and 2.6" thick. The latter appears to correspond to Greene's (1983) Thick Anglo-American Country Brick type, which dates to around 1820-1870. One nearly whole fire brick also was collected. The

TABLE II
ARTIFACTS RECOVERED FROM SURFACE COLLECTIONS
CARR POINT HOUSE SITE (16PC23)

| | |
|--|------------|
| CERAMICS | |
| Whiteware | 3 |
| Ironstone | 46 |
| Green transfer-print ironstone | 1 |
| English majolica | 3 |
| Porcelain | 3 |
| Brown salt glazed stoneware, albany slipped interior | 1 |
| GLASS | |
| Amethyst glass | 8 |
| Amethyst pressed glass | 1 |
| Amethyst convex glass | 1 |
| Amethyst paneled flask glass | 3 |
| Amethyst liquor bottle neck, tooled lip | 1 |
| Amethyst bottle base, turn molded | 1 |
| Blue glass | 1 |
| Brown glass | 3 |
| Clear glass | 4 |
| Clear pane glass | 1 |
| Clear pressed glass | 1 |
| Clear ink bottle, automatic bottle machine | 1 |
| Dark green glass | 6 |
| Light blue pressed glass | 2 |
| Light green glass | 8 |
| Light green pane glass | 3 |
| Light green pharmaceutical flask, tooled lip | 1 |
| Light green pharmaceutical flask, 2 piece mold | 1 |
| Light green milk? bottle glass | 1 |
| METAL | |
| Miscellaneous square nail | 1 |
| Wire nail | 3 |
| Square spike | 3 |
| Brass keyhole plate | 1 |
| Copper plate fragment | 1 |
| Door hinge | 1 |
| Barbed wire | 5 |
| Chain link fragment | 1 |
| Shovel blade | 1 |
| Bullet | 2 |
| Bullet cartridge | 1 |
| Clock gear | 1 |
| Cooking pot | 2 |
| Handle | 1 |
| Metal eye | 1 |
| White metal buckle | 2 |
| Miscellaneous metal | 3 |
| MISCELLANEOUS | |
| White metal and plastic button | 1 |
| Mother of pearl button | 3 |
| Mother of pearl fragment | 1 |
| Fire brick | 1 |
| Brick fragment | 2 |
| Mortar fragment | 4 |
| Bone | 2 |
| TOTAL | 149 |

brick was marked "St. Louis A.B." It was very pale brown (10YR 8/4) in color, and measure 4.15" in width, 2.3" in thickness, and 8.2" in length.

Metal domestic hardware included two fragments of (presumed) cooking pots, and a small gear from a clock. Four buttons were recovered as well. Three of these were mother of pearl. One was two holed button that measured 1.5 cm. in diameter. The other two were 4 holed button; these measured 1.1 and 1.2 cm. in diameter. Shell buttons were first commercially produced in the United States around 1887-1890 (Rose 1985:41). The final button was made of white metal in a starburst pattern and had a broken shank. A light blue plastic "jewel" was set in the center. Other possible clothing remains were two white metal buckles.

Other artifacts collected included a square shovel blade, barbed wire fragments, a chain link fragment, a handle and a metal eye. Finally two bullets and a shell casing were collected. The bullets were modern .35 caliber roundnose bullets, and one of these had mushroomed as a result of impact. The shell casing was a .32 caliber rimfire cartridge, which dates to the late nineteenth century.

As noted above, ceramics and glass artifacts indicate the site dates to the late nineteenth/early twentieth century. The presence of ceramic, glass, and metal kitchenwares, as well as architectural debris, clothing hardware, and tools suggest that the assemblage is associated with a former residence. Interpretation of the status of the site's former occupants is somewhat more problematic, and is considered in the discussion below.

The Hog Point House Site (16PC24)

Eighty-one ceramic sherds were collected from 16PC24 (Table III). As was the case at the Carr Point site, the majority (60%, 49 sherds) were ironstone. All of these were undecorated, or exhibited molded relief decoration. Most of the ironstone identifiable as to a former function represented tableware; four plate fragments, three bowl fragments, three cup fragments, and eight saucer fragments were collected. Seven of the saucer fragments derived from a single vessel recovered from the deposits which are eroding from the upper terrace of the site (See Table III and Figures 31 and 32). One possible chamber pot rim was also collected.

Other ceramic tableware included whiteware/ironstone (3 sherds), porcelain (3 sherds), decaled porcelain (1 teacup fragment), and English majolica (1 sherd). One of the porcelain sherds appears to have been a small cup, possibly from a child's tea set. Utilitarian ceramics included one burnt yellowware fragment and twelve sherds of Bristol glazed brownware. Most of the latter may have derived from a single bowl/baking dish with a thick, collared rim.

TABLE III
ARTIFACTS RECOVERED FROM
HOG POINT HOUSE SITE (16PC24)

| | SURFACE | IN SITU | TOTAL |
|---|----------------|----------------|--------------|
| CERAMICS | | | |
| Whiteware/ironstone | 3 | | 3 |
| Ironstone | 49 | 8 | 57 |
| Porcelain | 3 | 1 | 4 |
| Decaled Porcelain | 1 | | 1 |
| English majolica | 1 | | 1 |
| Burnt yellowware | 1 | | 1 |
| Bristol glazed brownware | 12 | 1 | 13 |
| Burnt ceramic | 1 | | 1 |
| GLASS | | | |
| Amethyst glass | 10 | | 10 |
| Amethyst pressed glass | 1 | | 1 |
| Amethyst tumbler fragment | 1 | | 1 |
| Amethyst goblet stem | 1 | | 1 |
| Black glass | 1 | | 1 |
| Blue glass | 1 | | 1 |
| Brown glass | 4 | | 4 |
| Clear glass | 11 | | 11 |
| Clear glass goblet base | 1 | | 1 |
| Clear glass milk bottle neck | 2 | | 2 |
| Clear bottle neck, automatic bottle machine | 1 | | 1 |
| Dark green glass | 7 | 1 | 8 |
| Dark green glass, 3 piece mold? | 1 | | 1 |
| Light green glass | 16 | | 16 |
| Light green pane glass | 9 | | 9 |
| Light green paneled flask glass | 4 | | 4 |
| Light green bottle glass, 2 piece mold, cut bottom | 1 | | 1 |
| Light green bottle glass, 2 piece mold, post bottom | 1 | | 1 |
| Light green glass milk bottle neck, tooled lip | 1 | | 1 |
| Opaque green glass | 4 | | 4 |
| METAL | | | |
| Miscellaneous square nail | 1 | | 1 |
| Square cut nail | 3 | | 3 |
| Miscellaneous nail | 1 | | 1 |
| Square spike | 2 | | 2 |
| Wire spike | 1 | | 1 |
| Hinge strap | 1 | | 1 |
| Shovel blade | 1 | | 1 |
| Harness ring | 1 | | 1 |
| Bullet | 3 | | 3 |
| Shot | 2 | | 2 |
| Cooking pot | 2 | | 2 |
| (Coffee?) grinder top | 1 | | 1 |
| Waffle iron | 1 | | 1 |
| (Knife?) handle | 1 | | 1 |
| Handle | 1 | | 1 |
| Cooper change-purse closure | 1 | | 1 |
| Lead fragment | 1 | | 1 |
| MISCELLANEOUS | | | |
| Pipe bowl fragment | 1 | | 1 |
| Brick fragment | 1 | 1 | 1 |
| Plastic | 1 | | 1 |
| Gravel | 1 | | 1 |
| TOTAL | 177 | 12 | 189 |

One ceramic fragment was too badly burnt to identify. As noted above, the yellowware sherd exhibited evidence of having been exposed to fire, as did at least one ironstone sherd. This may suggest the intentional burning of refuse by the site's former inhabitants. However, none of the other materials collected showed evidence of having been burnt.

A Mean Ceramic Date was not calculated for the collection because of the potential for an unreliable result based primarily on the median date for ironstone. Although two sherds exhibited makers' marks, these were too fragmentary to permit identification. However, a sufficient amount of the mark was present on the ceramic saucer recovered from the eroding deposits, to determine that it had been marked "England." This suggests that the piece postdates 1890, when marking the country of manufacture became required. As was the case at 16PC23, the ceramics from 16PC24 suggest a late nineteenth/early twentieth century date for the site. Like the ceramic assemblage from 16PC23, the one from this site lacks true whiteware and contains few transitional whiteware/ironstone pieces, indicating that the site probably postdates the Civil War.

Similarly, the few datable glass sherds of the 79 collected suggest a late nineteenth/early twentieth century date for the collection. Bottles manufactured in two piece molds with both cup and post bottoms were represented, as were tooled lip fragments. One glass sherd exhibited a horizontal seam and may have been a fragment of a three piece molded bottle. Thirty-seven percent of the glass was either amethyst (13 sherds) or clear (15 sherds), which also supports a late nineteenth/early twentieth century date for the assemblage. Glass tableware included a goblet, tumbler, and pressed glass fragments.

Other kitchenware collected from 16PC24 included a waffle iron plate such as those used on a wood burning stove; the top of a grinder, probably used for coffee; a possible knife handle; and a fragment of a cooking pot. The latter appears to have had four feet and two vertical side handles; it measured approximately 20 cm in diameter. Architectural debris included square nails and spikes, a hinge strap, and two brick fragments. One of the bricks measured 4" wide and 2.35" thick. It was reddish brown (2.5YR 5/4) and very hard fired in contrast to the "country brick" seen at the Carr Point site. The other brick fragment was soft and red (2.5YR 5/8).

Interestingly, a square shovel blade was also recovered from the Hog Point site. One harness ring was found, as well as a metal handle. Personal items collected included a fragment of a brown earthenware pipe bowl and the closure mechanism from a small change purse.

Ammunition was also recovered from 16PC24. These included two .35 caliber bullets, one .30 caliber bullet, a pellet of No. 4 buckshot, and a pellet of 00 buckshot. The 00 buckshot had mushroomed slightly as a result of impact. All appear to be modern, and probably derive from recent hunting in the area. One plastic fragment was also found.

Discussion of Artifact Analysis for Historic Sites

Interpretation of the socio-economic status of former occupants of the Carr Point and Hog Point sites is somewhat problematic. During the first half of the nineteenth century, ceramic decoration is related to their cost (Miller 1980). Price lists for that time indicate that transfer-printed ceramics were the most expensive, while undecorated ceramics cost the least. This relationship is not as strong after the introduction of undecorated ironstone in the mid nineteenth century. Miller (1980:4) notes that undecorated ironstone was often equal in price to transfer printed ceramics, and that use of the former appears to have replaced use of the latter during the period 1850-1870. Thus, the fact that 93% of the ceramic tableware from 16PC23 and 97% of the ceramic tableware from 16PC24 did not exhibit decoration does not necessarily indicate that these were lower-status occupations.

However, porcelain teaware was more expensive than undecorated ironstone teaware in the late nineteenth century (Miller 1980:32). If all categories of porcelain were more expensive than ironstone, then the frequency of the former may be used as an indicator of relative status.

Porcelain represented 5.4% and 7.6% of the ceramic tableware collections at 16PC23 and 16PC24, respectively. By comparison, the porcelain frequencies were higher at two contemporaneous sites on the west bank of the Mississippi River in Orleans Parish, 16OR123 and 16OR124 (Franks and Yakubik 1989). At 16OR123, which was associated with a residence on a small (one arpent front) parcel, porcelain comprised 13.0% of the ceramic tableware. Porcelain represented 41.6% of the ceramic tableware at 16OR124, which was associated with a small (three arpents front) farmstead. This suggests that the occupations at 16PC23 and 16PC24 had lower socio-economic status than the Orleans Parish sites. If so, the materials from the two Pointe Coupee sites probably represent the remains of small farmsteads or, more likely tenant farms. This conclusion is supported by the presence of tools (shovel blades) at both sites. While farming implements might be expected in the refuse of a tenant farmer, it is unlikely that they would be found with the domestic refuse of a great house occupation.

In addition, the two Orleans Parish sites had less undecorated ironstone and whiteware/ironstone than the two sites in Pointe Coupee. Undecorated ironstone and whiteware/ironstone represented 87.5% and 90.9% of the ceramic tableware at 16PC23 and 16PC24 respectively, while they represented only 60.1% of the tableware from 16OR123 and 54.2% from 16OR124. The lower frequency of ironstone and whiteware ironstone at 16OR124 is due to the high percentage of porcelain in the collection. Also, a relatively high percentage (20%) of the tableware at 16OR123 was decorated. This suggests greater market access for the sites near New Orleans.

Analysis of Prehistoric Artifacts

The artifact assemblages from the two prehistoric sites near the project area consisted overwhelmingly of aboriginal ceramic sherds. The possible lithic material from 16CO29 was not found *in situ* and was surrounded by other stone material that had fallen down from the road bed over the bank from which the artifacts were eroding.

Prehistoric items such as lithics, bone, and pottery have long been found in a variety of distributions and cultural components at archeological sites in Louisiana. Of these artifacts, ceramic sherds have been noted as the artifact that show the greatest variety of manufacturing and design styles (e.g. Beyer 1896 and 1898; Moore 1911, 1912 and 1913; and Fowke 1927). But attempts to place these artifacts in a chronological order associated with various cultural periods in prehistory was not begun until the 1930s. These attempts were based largely on the stratigraphic contexts of *in situ* deposits of ceramic sherds and the close analysis of surface collections.

James A. Ford's work in the Lower Mississippi Valley, was perhaps the first attempt to note the differences of aboriginal ceramics and attempt to place them in some sort of chronological order, although Setzler's unpublished work at the Marksville site may have predated Ford's efforts at ceramic analysis (Setzler 1933 and 1934). One of Ford's earlier works, *Analysis of Indian Village Site Collections from Louisiana and Mississippi* (1936), was an effort to impose some methodology and order of analysis on the mass of artifactual data that was then available to archeologists working in the Southeast. Ford started with artifacts from sites that had been noted in early European colonial records as places of aboriginal habitation and essentially worked backwards. In all his analyses he noted tempering and color of the paste of the ceramic sherds, their hardness and thickness and remarked on any distinct design motifs. His initial chronology worked back in time from such historic aboriginal groups as the Choctaw, Tunica, Caddo and Natchez into categories of his own construction such as Deasonville, Coles Creek, and Marksville.

Also in the 1930s, Ford was involved with archeological work for the Works Project Administration along with other archeologists such as Gordon Willey, George Quimby, and R.S. Neitzel. Work emanating from this period expanded, modified and refined the ceramic chronology initially proposed by Ford. For example, whereas the Marksville cultural complex was previous thought to be the earliest manifestation of the use of ceramics, WPA era work reported on by Quimby firmly established that the Tchefuncte period predated the Marksville and was the first to manufacture and use ceramic vessels (Ford and Quimby 1945). The chronology was further refined to include such ceramic complexes as Troyville, and Plaquemine. In addition, the archeological work done in the 1930s established the use of the type/variety nomenclature in pottery classifications.

The time sequence of aboriginal settlement in the Lower Mississippi Valley was further refined by survey and excavation work done by Ford, James B. Griffin, and Philip Phillips of the Lower Mississippi Survey in the late 1940s and early 1950s. A product of

this work was the report by Phillips entitled *Archaeological Survey in the Lower Yazoo Basin, Mississippi, 1949-1955* (1970). This work has been extensively used ever since as a reference for recognizing and categorizing aboriginal artifacts recovered within the Lower Mississippi Valley. Although refinements and alterations of this study continue to this day as more data becomes available, Phillip's work has served as the basis for the analysis of prehistoric ceramic artifacts described in this report.

Discussion of Prehistoric Artifact Analysis

Because of the surface provenience of all the artifacts recovered from the prehistoric sites near the project area, little can be said about the sites that would be truly definitive. The Baytown Plain ceramics at the Prairie Lake Mound (eight body sherds and one rim sherd; Figures 42 and 43), as well as the situation of the human remains recovered during this project and by C.B. Moore strongly suggest a Coles Creek component at the site. A larger scale project, involving excavations on and around the mound would, of course, reveal much more information. Such a project would have to take into account the alluviation that has apparently covered the site frequently in the past.

The artifacts at 16CO29 (Figures 44-50) found in what may be a midden area underlying about a meter or more of alluvium or spoil suggest an even earlier occupation of the area. The issue of whether the Troyville pottery types found at this site indicate a transition between Marksville Period ceramics to Coles Creek Period pottery is not yet satisfactorily resolved. Further study of this site, while it is still possible, may shed light on this question (Table IV).

**TABLE IV
PREHISTORIC ARTIFACTS FROM THE OUTFLOW
CHANNEL OF THE MURRAY POWERPLANT (16CO29)**

| SHERD TYPE | NUMBER |
|---|-----------|
| Baytown Plain, var. <i>Baytown</i> | 56 (5) |
| Evansville Punctated, var. <i>Rhinehart</i> var. <i>Sharkey</i> | (1) 1 |
| Marksville Incised, var. <i>Yokena</i> var. <i>unspecified</i> | 1 1 |
| Marksville Stamped, var. <i>Troyville</i> | 3 |
| Mulberry Creek Cord Marked, var. <i>Edwards</i> | 1 |
| Decorated Unidentified | 2 |
| Basal Fragments | 2 |
| TOTAL | 73 |

() Indicates rim sherd

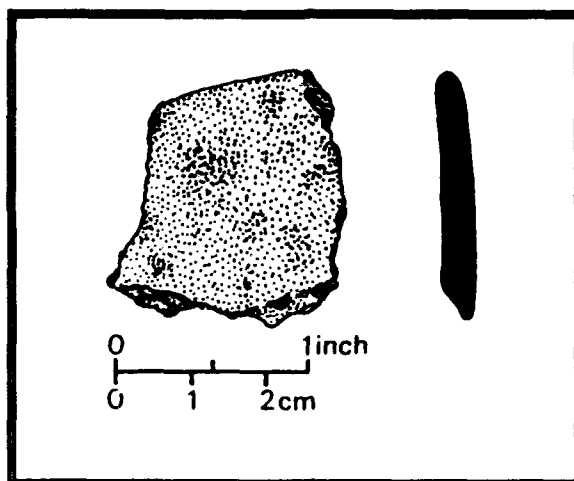


Figure 42: Baytown Plain rim sherd from surface of mound summit at Prairie Lake Mound (16CO28).

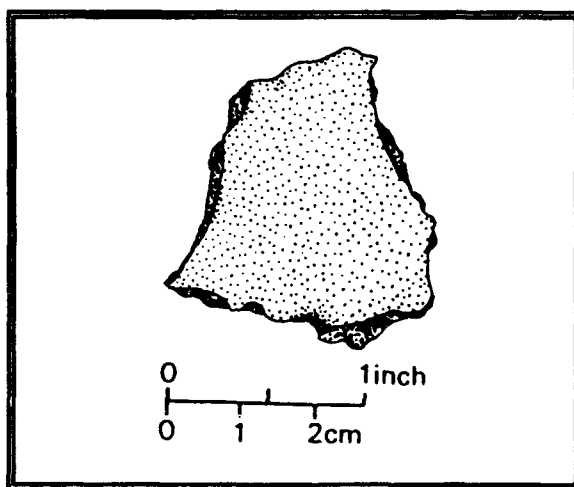


Figure 43: Baytown Plain body sherd found on surface of mound summit at Prairie Lake Mound (16CO28).

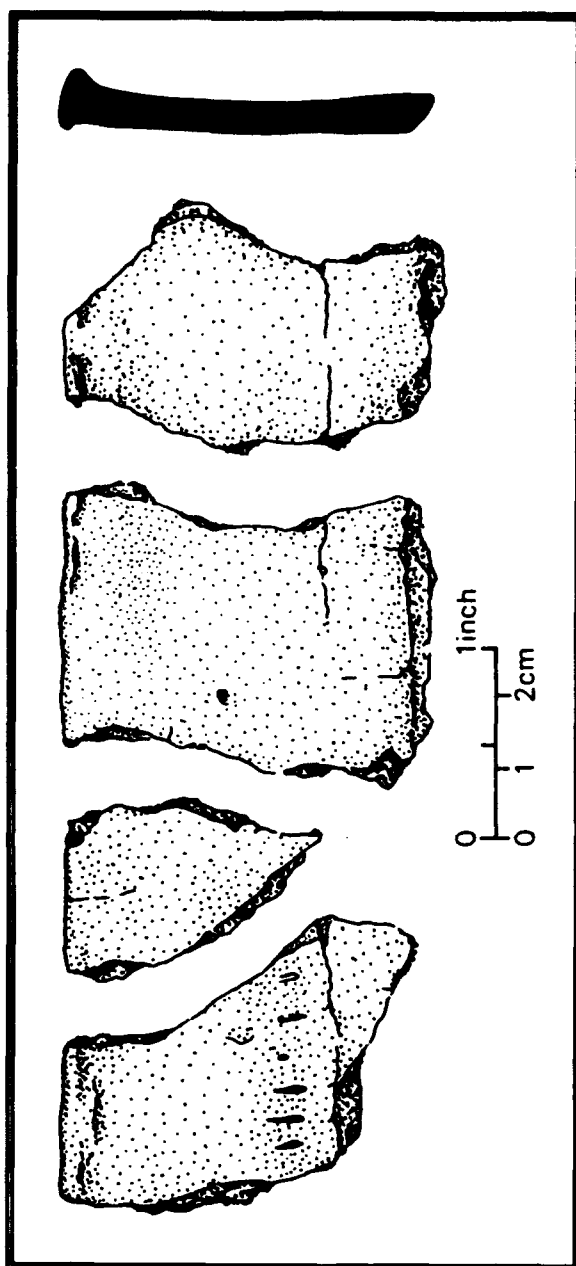


Figure 44: Four articulated rim sherds, with profile, from Murray Outflow Channel Midden (16CO29).

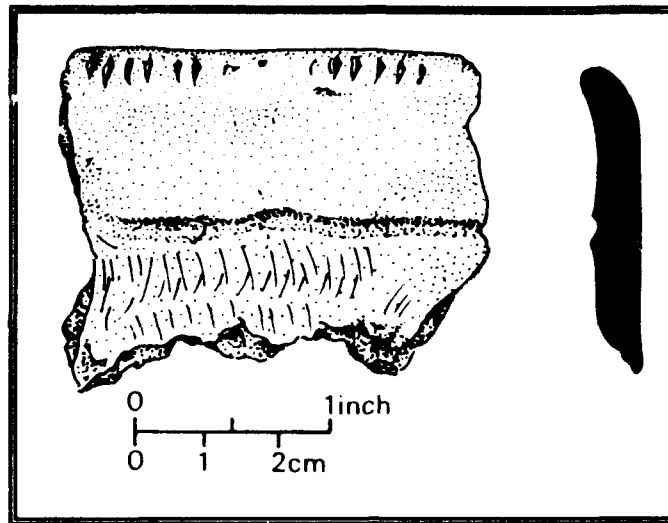


Figure 45: Rim sherd from 16CO29 showing rocker stamping diagnostic as Marksville Stamped, *var. Troyville*.

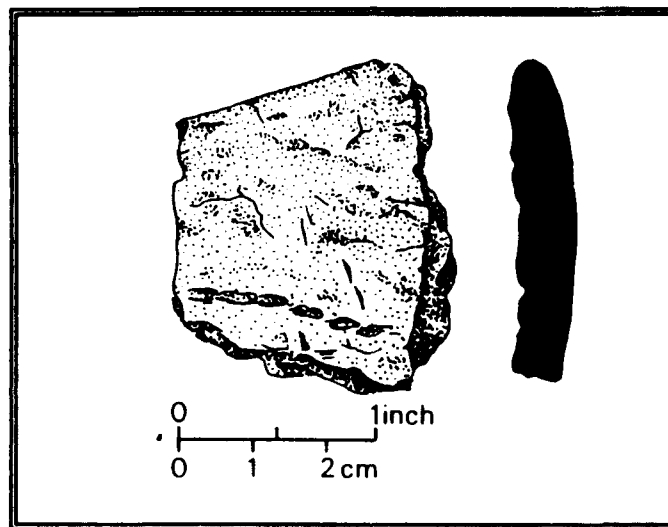


Figure 46: Rim sherd from 16CO29 showing punctations diagnostics as Evansville Punctated, *var. Rhinehart*.

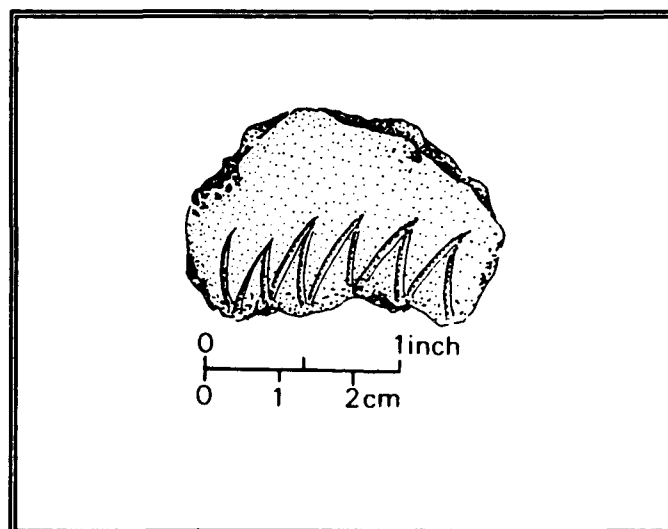


Figure 47: Body sherd from 16CO29 showing design diagnostic as Marksville Stamped, *var. Troyville*.

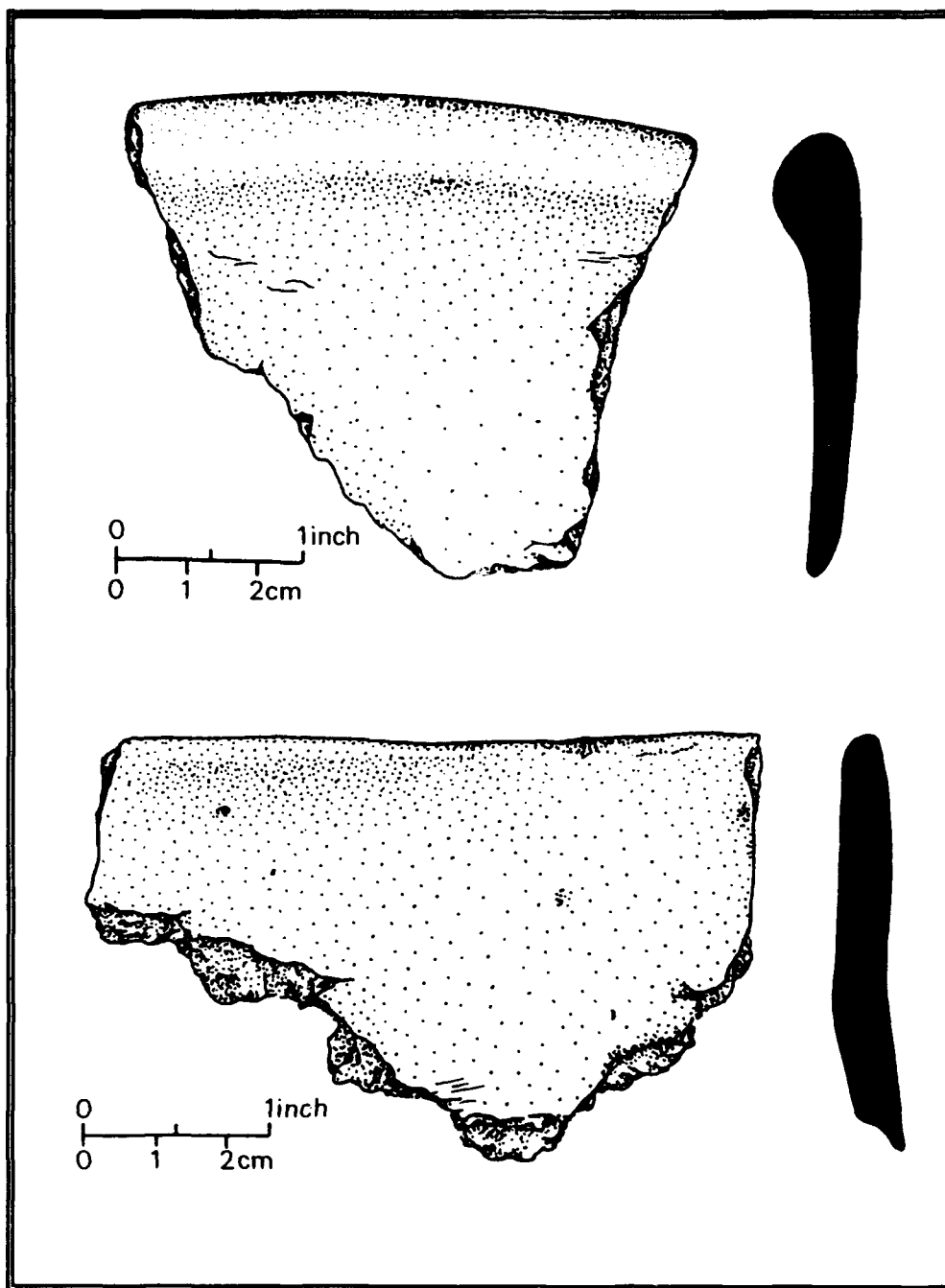


Figure 48: Two Baytown Plain rim sherds from surface of 16CO29.

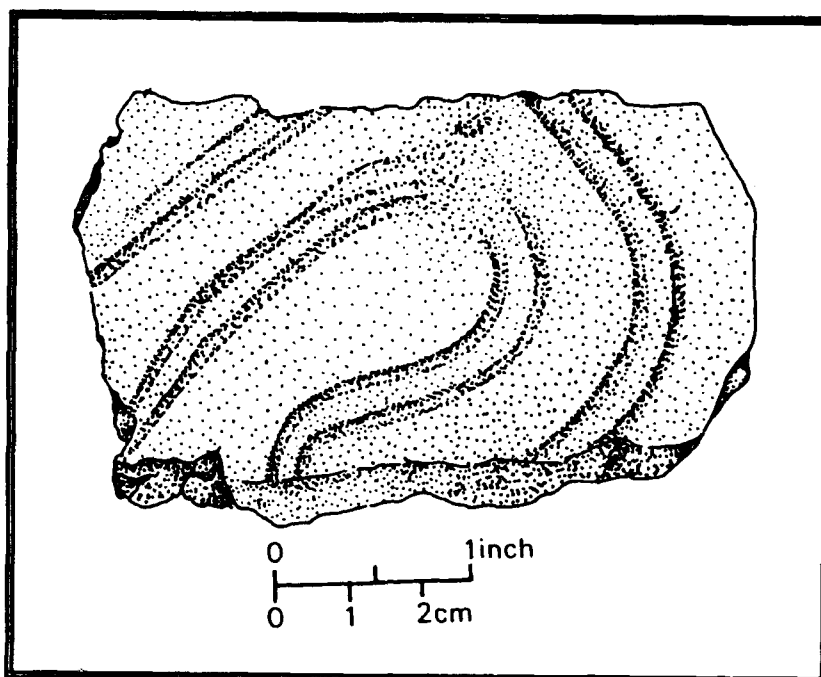


Figure 49: Body sherd from 16CO29, Marksville Incised, *var. Yokena*.

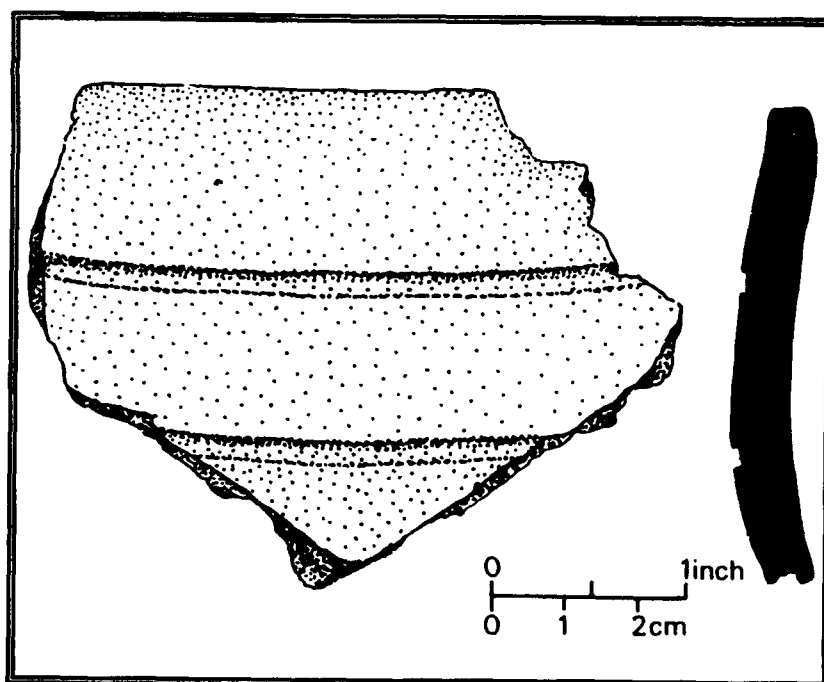


Figure 50: Rim sherd from 16CO29, Marksville Incised, *var. unspecified*.

CHAPTER IX

CONCLUSIONS AND RECOMMENDATIONS

Two sites of historic occupation, 16PC23 and 16PC24, were found within the project area where revetments are scheduled to be placed. From artifact analysis, both sites appear to date from the late nineteenth to the early twentieth century. Furthermore, the type of debris associated with the sites give evidence of house sites that the actions of the Mississippi River have largely destroyed. No standing structures are associated with either site. These two sites contain greater artifactual evidence of nineteenth-twentieth century farmstead house sites in the region around the project area than previously reported archeological sites (Swanson 1982; Thomas 1983).

Sufficient information has been gathered about the ownership of the property during the period suggested by the artifacts and little archeological or historical information would be gained by further archeological work. The criteria of selection to the National Register of Historic Places are deemed inapplicable to both sites. Revetment work should proceed as planned throughout the area surveyed.

It should be noted that because of the extensive bank erosion in portions of the study area, many sites of historic and perhaps prehistoric occupation have been taken by the Mississippi River. Furthermore, the geomorphological changes wrought on the area by the completion of Shreve's Cutoff and Raccourci Cutoff in the mid-nineteenth century were enormous. These man made alterations of the river's course also affected the likelihood of site detection in the project area.

The two prehistoric sites outside, although near, the immediate project area were newly reported as a result of informant contacts made during this project. One of these sites, the Prairie Lake Mound (16CO28), turned out to be a rediscovered mound site reported in 1911 by C.B. Moore as the Glendale Landing Mound. Site 16CO29 is a midden site eroding out in a newly dug bank of the outflow channel of the Sidney A. Murray Hydroelectric Powerplant near the Old River Control Structure in Concordia Parish. The Prairie Lake Mound showed evidence of human burial within the mound and artifactual data seemed to indicate a Coles Creek period occupation. The Murray Outflow Channel Midden, however, suggested an even earlier occupation, with ceramics indicating a late Marksville to Troyville presence.

These two sites, along with 16CO21, are all in the so called Three River region which is likely to witness future construction activities by the Army Corps of Engineers. It is noted that these sites obviously indicate a prehistoric occupation of the area and it is therefore recommended that any future work planned for the region should include a cultural resources survey.

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SCOPE OF SERVICES

**CULTURAL RESOURCES SURVEY OF MILE
306.3 TO 293.4-R, MISSISSIPPI RIVER**

**CONTRACT DACW29-88-D-0123
DELIVERY ORDER 04**

SCOPE OF SERVICES
CULTURAL RESOURCES SURVEY OF
MILE-306.3 TO 293.4-R, MISSISSIPPI RIVER

CONTRACT DACW29-88-D-0123
DELIVERY ORDER 04

1. Introduction. This delivery order calls for a cultural resource investigation of three Mississippi River revetment easements located in Concordia and Pointe Coupee Parishes, Louisiana (Enclosure 1, Hydrographic Survey Charts 6 through 9). The items of work are the Above Old River, Carr Point and Hog Point Revetments. The project will require survey of approximately 8.7 miles of undeveloped batture along the Mississippi River. Aerial mosaic plans for the three items are attached to this scope of service (Enclosures 2 and 3, Sheets 5, 6 and 7 of Mississippi River Mile 0.0 AHP to 330.0 AHP in 61 Sheets). The contract period for this delivery order is 217 days.

2. Project Impact. The proposed revetments will directly impact the river's bank line. These reaches will be stabilized with continuous, articulated concrete mattress which is mechanically laid from the low water line to a point several hundred feet into the river channel. To prepare for revetting, a 200 to 300 foot wide corridor adjacent to the bank line will be cleared of all vegetation and graded to a standard slope. Slope grading will remove the upper bank line. Any cultural resource within 300 horizontal feet of the bank line and within 10 vertical feet of the ground surface has a high potential for being destroyed. Surficial resources further than 300 feet from the bank line may be subject to disturbance from the movement of heavy equipment, but buried sites will remain intact.

3. General Nature of the Work to be Performed. The Contractor is responsible for: a) surveying approximately 8.7 miles of Mississippi River batture; b) assessing the significance of all newly discovered sites; c) predicting the locations of subsurface prehistoric and historic sites within the project easements identified in Table 1; d) assessing the impact of construction, erosion and overbank deposition to resources found; and e) preparing comprehensive draft and final reports of investigation for the study.

4. Study Requirements. The work to be performed by the Contractor will be divided into three phases: Literature Search and Records Review; Intensive Survey and Site Assessment; and Data Analysis and Report Preparation.

a. Phase 1: Literature Search and Records Review. The Contractor shall commence, upon work item award, with a literature, map, and records review relevant to the project reach (M-306.3 to 293.4 -R). This phase shall include but not be limited to review of historic maps, the State Archeologist's site and standing structure files, the National Register of Historic Places, geological and geomorphological data, archeological reports, ethnohistoric records, historic archives, and public records.

At a minimum, the literature and records review will familiarize the reader with the geomorphology (point bars, cutbanks, crevasses, relict channels, etc.) of the study area; establish the distribution of prehistoric and historic sites in the region and their proximity to each study area; identify previously recorded sites, standing structures, National Register of Historic Places properties and National Landmarks in or in close proximity to the project area; provide national, regional and local context for assessing the historical, architectural and archeological contribution of all sites and structures located

in the project area; and predict resources which can be expected to be located within each revetment reach. Economic and social trends, channel migration, major natural events, and all previous construction affecting land use patterns and the state of preservation of predicted resources will be analyzed and presented. The literature search will place this contract effort within the context of similar work conducted previously along the Mississippi River. The focus of this literature search shall be on man's use of this particular reach of the Mississippi River and its natural levee through time.

b. Phase 2: Intensive Survey and Site Assessment. Fieldwork may commence upon delivery order award. The survey corridor will be 500 feet wide, paralleling the bank line, measured landward from the edge of top of bank between the ranges identified on Table 1.

The contractor will furnish a letter report of the results of survey and site assessment of the following segments to the Technical Representative as each is finished, but no later than December 1, 1988:

More Old Town
Carr Point M-302.7 to 301.0-R (9000 ft downstream of the inplace Carr Point Revetment)
Hog Point M-300.0 to 299.0-R (4000 ft upstream of the inplace Hog Point Revetment at Miles Bar Towhead)

The Technical Representative will be informed ahead of time of the testing schedule of all sites.

An intensive survey is a comprehensive, systematic, and detailed physical examination of a project item for the purpose of locating and inventorying all cultural resources within the impact zone. The survey will be performed within the context of an explicit research design (to be presented in the report of investigation), formulated in recognition of all prior investigations in the study area and surrounding region, and will include subsurface testing and evaluation of identified resources against the National Register of Historic Places criteria of significance (36 CFR 60.4). The survey will provide adequate information to seek determinations of eligibility from the Keeper of the National Register, and will innumerate project effects on each resource located within the study area. The evaluation will be conducted utilizing current professional standards and guidelines including, but not limited to:

the National Park Service's draft standards entitled, "How to Apply the National Register Criteria for Evaluation", dated June 1, 1982;

the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation as published in the Federal Register on September 29, 1983;

Louisiana's Comprehensive Archaeological Plan, dated October 1, 1983;

the Advisory Council on Historic Preservation's Section 106 Update/3 entitled, "Manual of Mitigation Measures (MOMM)", dated October 12, 1982.

The survey shall be an intensive pedestrian investigation augmented by systematic subsurface testing. Maximum survey transect width will not exceed 20 meters. The areas surveyed and all sites located within project boundaries will be recorded (in ink) to scale on the appropriate 7.5 minute quadrangle and aerial mosaic project maps. The quadrangle maps will be used to illustrate site forms (see below). One copy of the aerial mosaic project maps, marked with the locations of all sites and historic structures in the project easements, will be returned to the COR with the draft report of investigation. All sites will be sufficiently tested using shovel, auger or other excavation techniques to determine and record site size, depth of deposit, stratigraphy, cultural association, function, approximate date of

occupation, and condition. Site boundaries, test excavation units at sites (including test pits, shovel tests, auger intervals, backhoe trenches, etc.) and activity areas will be measured and mapped to scale. All scaled field maps will accurately reference grid locations in terms of levee stations or range markers in close proximity to the illustrated work area. The actual elevation (NGVD) of all buried sites will be determined and mapped, including the top of bank, and top and bottom of cultural strata.

All shovel tests and test excavation units will be backfilled immediately upon completion.

Caution and proper protective gear (such as high visibility orange safety vests) may be necessary should the survey and testing phase extend into the hunting season.

The Contractor will fill out and file state site forms with the Office of the Louisiana State Archeologist and cite the resulting state-assigned site numbers in all draft and final reports of this investigation. The Contractor will submit updated state site forms to the State Archeologist for all previously discovered sites. These forms will correct previously filed information and summarize what is known of each resource as a result of this investigation. One unbound copy of each site or standing structure form will be submitted to the COR with the draft report.

All standing structures located in the survey area will be identified by function, dated and described using standard terminology of formal and/or vernacular architecture, as appropriate to each structure. Each standing structure predating 1945 and/or of potential National Register eligibility will be recorded (using a simplified, standardized format selected by the Division of Archaeology and Historic Preservation), accompanied by a minimum of three, clear, black and white photographs showing front, back and side views of the structure. The Contractor will determine whether subsurface features are present. If present, the structure and all features shall be treated as a site, which shall be mapped and recorded on State of Louisiana site forms. The Contractor shall assess the significance of all standing structures using information collected during the survey and literature search phases of this work item.

If sites exist in the project right-of-way which require extensive testing to determine their condition, data producing potential or significance, the need for further work will be discussed with the Technical Representative prior to the completion of all field work.

c. Phase 3: Data Analyses and Report Preparation. All survey and testing data will be analyzed using currently acceptable scientific methods. The Contractor shall catalog all artifacts, samples, specimens, photographs, drawings, etc., utilizing the format currently employed by the Office of the Louisiana State Archeologist. The catalog system will include site and provenience designations.

All literature, map search, field and laboratory data will be integrated to produce a single, graphically illustrated, scientifically acceptable draft report discussing the three project rights of way. Historic and geomorphological data relevant to these segments are to be analyzed in conjunction with physical examination results to determine whether buried resources were ever present and whether they would have been damaged by previous construction. These analyses will be reported within the context of the physical environment of the Mississippi River batture, 19th and 20th century public works construction techniques, current knowledge of site distribution by period and phase on the natural levee, and the body of archeological work conducted on the Mississippi River's natural levee in Louisiana. Project impacts on all cultural resources located and/or tested by this study will be assessed. The Contractor shall provide justification of the rationale used and a detailed explanation of why each resource does or does not meet the National Register significance criteria (36 CFR 60.4). For each resource recommended as eligible to the National Register and assessed to be impacted by construction, the Contractor shall recommend specific mitigation alternatives. Inferential statements and conclusions will be supported by field, map or archival data. It will not be sufficient to make significance recommendations based solely upon the condition or artifactual content of the site in question. All

significance assessments of sites and structures will be stated in terms of the context of similar Mississippi River floodplain sites and the specific scientific contribution of the site, site component or structure which requires protection or mitigation.

6. Reports.

a. Monthly Progress Reports. One copy of a brief and concise statement of progress shall be submitted with and for the same period as the monthly billing voucher throughout the duration of the delivery order. These reports, which may be in letter form, should summarize all work performed, information gained, or problems encountered during the preceding month. A concise statement and graphic presentation of the Contractor's assessment of the monthly and cumulative percentage of total work completed by task shall be included each month. The monthly report should also note difficulties, if any, in meeting the contract schedule.

b. Draft and Final Reports (Phases 1, 2, and 3). Five copies of a draft report integrating all phases of this investigation will be submitted to the COR for review and comment 126 days after the date of the order.

An estimate of the acreage surveyed for this project will be given in the report introduction. All sites cultural resources located within the survey corridor will be summarized by reach in tabular form in the introductory chapter.

The draft and final reports shall include all data and documentation required by 36 CFR 60-63 to prepare requests for Determination of Eligibility to the National Register of Historic Places for those sites recommended by the Contractor as significant. The Contractor shall recommend appropriate mitigation procedures for each significant cultural resource. For those sites considered worthy of additional testing, the Contractor will recommend a specific testing scheme which is appropriate to the site, its physical setting and condition.

These written reports shall follow the format set forth in MIL-STD-847A with the following exceptions: 1) separate, soft, durable, wrap-around covers will be used instead of self covers; 2) page size shall be 8-1/2 x 11 inches with a 1-1/2-inch binding margin and 1-inch margins; 3) the text reference and Reference Cited formats of Society for American Archaeology will be used. Spelling shall be in accordance with the U.S. Government Printing Office Style Manual, dated January 1973.

The body of each report shall include the following: 1) introduction to the project and to the reachment reaches; 2) environmental setting; 3) review and evaluation of previous archeological investigations; 4) distribution of known prehistoric and historic settlement in the study area; 5) research design; 6) description of field and laboratory methodology, statement of project objectives, analysis of effectiveness of methods; 7) data analyses and cultural material inventories; 8) data interpretation; 9) data integration; 10) conclusion; 11) recommendation; 12) references cited; and 13) appendices, as appropriate.

The COR will provide all review comments to the Contractor within 60 days after receipt of the draft reports (186 days after delivery order award). Upon receipt of the review comments, the Contractor shall incorporate or resolve all comments with the approval of the COR and submit one reproducible master copy and 40 bound copies of each report of investigation, and all separate appendices to the COR within 217 days after work item award.

In order to preclude vandalism, the draft and final reports shall not contain specific locations of archeological sites.

significance assessments of sites and structures will be stated in terms of the context of similar Mississippi River floodplain sites and the specific scientific contribution of the site, site component or structure which requires protection or mitigation.

6. Reports.

a. Monthly Progress Reports. One copy of a brief and concise statement of progress shall be submitted with and for the same period as the monthly billing voucher throughout the duration of the delivery order. These reports, which may be in letter form, should summarize all work performed, information gained, or problems encountered during the preceding month. A concise statement and graphic presentation of the Contractor's assessment of the monthly and cumulative percentage of total work completed by task shall be included each month. The monthly report should also note difficulties, if any, in meeting the contract schedule.

b. Draft and Final Reports (Phases 1, 2, and 3). Five copies of a draft report integrating all phases of this investigation will be submitted to the COR for review and comment 126 days after the date of the order.

An estimate of the acreage surveyed for this project will be given in the report introduction. All sites cultural resources located within the survey corridor will be summarized by revetment reach in tabular form in the introductory chapter.

The draft and final reports shall include all data and documentation required by 36 CFR 60-63 to prepare requests for Determination of Eligibility to the National Register of Historic Places for those sites recommended by the Contractor as significant. The Contractor shall recommend appropriate mitigation procedures for each significant cultural resource. For those sites considered worthy of additional testing, the Contractor will recommend a specific testing scheme which is appropriate to the site, its physical setting and condition.

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TABLE 1

| <u>REVELMENT ITEM</u> | <u>LOCATION</u> | <u>RANGES</u> | <u>HYDRO CHART</u> | <u>COMMENTS</u> |
|---------------------------|--|---|------------------------|---|
| Above Old River | M-306.3 to 305.1-R | Tarbert Landing Discharge to U-10 | 6 | survey 500 foot wide corridor parallel and adjacent to river's edge |
| Carr Point | M-302.8 to 300.0-R | D-15 to D-155 | 7,8 | same as for Above Old River |
| Hog Point | M-300.0 to 299.0-R M-298.6 to 297.0-R M-295.5 to 293.4-R | U-241 to U-180 U-134 to U-40 D-40 to D-100+ | 8,9 | same as for Above Old River; no survey required of M-299 to 298.6-R and M-297 to 295.5-R; these areas were previously revetted; include entire reach (M-300.0 to 293.4) in literature search. |